

Health-related Internet Usage in the Service Outpatient Department of De La Salle University Medical Center*

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ABSTRACT

Background: Health related internet usage is common among patients globally. The literature review showed no local study regarding health-related internet usage in the Philippines hence investigation of internet use for medical information in the outpatient department was done

Objective: To describe the health-related internet usage; its prevalence, reasons & experience on use, perceived effects and sources of medical information in the Outpatient Department of a tertiary Hospital.

Method: A single center, observational, cross-sectional study utilizing a modified 33-item self-administered questionnaire about Health-related Internet usage of patients consulting at the service outpatient department of De La Salle University Medical Center, Dasmariñas City, Cavite, Philippines from September-October 2020. 381 eligible participants were included in the study based on the computed sample size. The data were reported as frequencies and percentage distribution.

Results: Majority of the participants belongs to the 26-35 years old group (32.02%) and most were Females (69%). Most used the Internet in general (88%) and Health-related internet usage was high among these users (78.42%). Despite the high internet usage, majority stated that the primary source of medical information was Doctors (76.25%). Commercial websites such as (Google & Yahoo) were the most commonly used during health-related searches (40.49%) and most searches were

about their medical condition (36.22%). Most of the participants stated that sometimes they trust information from the internet (58.63%) and find it useful (68%). Forty five percent stated that medical information obtained from the internet were applied without consulting a doctor and subsequently, many does not disclose this information during medical consultation with a doctor (64%). Participants stated that their primary reason for Health-related internet use was personal knowledge about medical condition (57%). Also, most of the participants believed that Health-related searches do not have an effect on their medical condition (62%) and relationship with their doctor (61%).

Conclusion: The study clearly indicated that Health-related Internet Usage was a common practice in the outpatient department. Although, majority of the patients stated that their Doctors were the primary source of medical information, many individuals still do not divulge medical information obtained from the internet hence physicians should regularly inquire regarding health-related internet usage and educate regarding erroneous online medical information to correct misperception that may affect their health. Lastly, due to the overwhelming use of the internet among patients, health institutions and practitioners may develop mobile friendly applications to render sufficient medical service and provide holistic care to patients especially in this time of pandemic.

Keywords: Health related Internet Usage, Outpatient Department, Patients

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INTRODUCTION

Access to massive health-related information from online sources result to increase freedom of patient to conduct their own searches concerning their disease management and alternative treatments prior or after medical consultation with a physician (14). Almost 13 million health-related searches conducted daily worldwide in the recent years (2). Despite the seeming value of Internet as source of health information, it is also one of the rich cradles of potentially alarming information about health and illness, and most of which with uncertain validity and this leads to potential increase in doubt and fear about their disease, particularly among anxious patient about their health^[12].

Among the survey findings of social media dashboard "Hootsuite" on its January 2018 report entitled "Digital in 2018", there were almost 67 million internet users in the Philippines and majority is active on social media and there was noted 12% increase in the number of internet users from the previous year. This survey report may indicate a rich front for increased online health seeking behavior especially for patient who are anxious and curious about their condition and turn to online sources for medical information.

The internet is an abundant source of health information for patients attending the primary care^[1,4,6,11,13,15,19,21,22,24] and Emergency room setting^[3]. Most of these online health information seekers are patient who have chronic diseases looking for disease-specific information. ^[2,3,11,12]. However, not only patients for consultations utilize the internet for health information, it was also evident among medical practitioners and students particularly those in the younger age group ^[3,10,13,19,21]. Studies conducted on internet usage among patients usually develop or adopt self-reported survey questions to assess and determine how prevalent online seeking behavior

and the factors associated with its usage ^[2,10,14,15]. Despite the great value of the internet sources for medical information, physician remains the most trusted source of information for patients ^[3,6]. Moreover, several studies done abroad reported high prevalence of health information searches and associated

beneficial and harmful effects on the user^[1,3,11,19,24]. Lastly, there was high internet usage in the local setup, 7 out of 10 Filipinos have used the internet for different purpose according to the latest Health Survey in 2017^[17]. One local study done by Hechanova & Ortega (2014) has concluded that many Filipino had use the internet not for health-related reason but primarily for basic communication. The literature review failed to show evidence of local study regarding health-related internet usage among patient. Hence, exploration of outpatient online usage specifically for health information and adaptation of internet survey questions was done to describe the health-related internet use of patients consulting at the service outpatient of De La Salle University Medical Center, Dasmariñas City, Cavite, Philippines. The study serves as the baseline research on health related internet usage in the Philippines.

GENERAL OBJECTIVE

- To describe the health related internet use of patients consulting at the service outpatient department of De La Salle University Medical Center

SPECIFIC OBJECTIVES

- To determine the prevalence of health-related internet usage among patients consulting at the outpatient department of De La Salle University Medical Center
- To identify the main sources of medical information of patients consulting at the service outpatient of De La Salle University Medical Center

- To determine the reasons and experiences on Health related internet use of patients consulting at the service outpatient department of De La Salle University Medical Center
- To describe the perceived effects of health related internet use of patients consulting at the service outpatient of De La Salle University Medical Center

METHODOLOGY

STUDY DESIGN

A cross sectional study design using a modified self-administered 33-item survey questionnaire adapted from the study of AlGhamdi and Moussa (2012).

STUDY POPULATION

The study included adult patient aged 18-65 years old consulting at the Service Outpatient department of De La Salle University Medical Center (DLSUMC)

INCLUSION CRITERIA

1. Adult male or female patient aged 18-65 years old with acute or chronic disease
2. Patients consulting in the department of Family and Community Medicine, Obstetrics and Gynecology, Surgery, Internal Medicine, Orthopedics, Otorhinolaryngology Head and Neck Surgery and Ophthalmology.

EXCLUSION CRITERIA

1. Patients requiring emergency room management
2. Psychiatric patients
3. Post-stroke patients with inability to write without companion

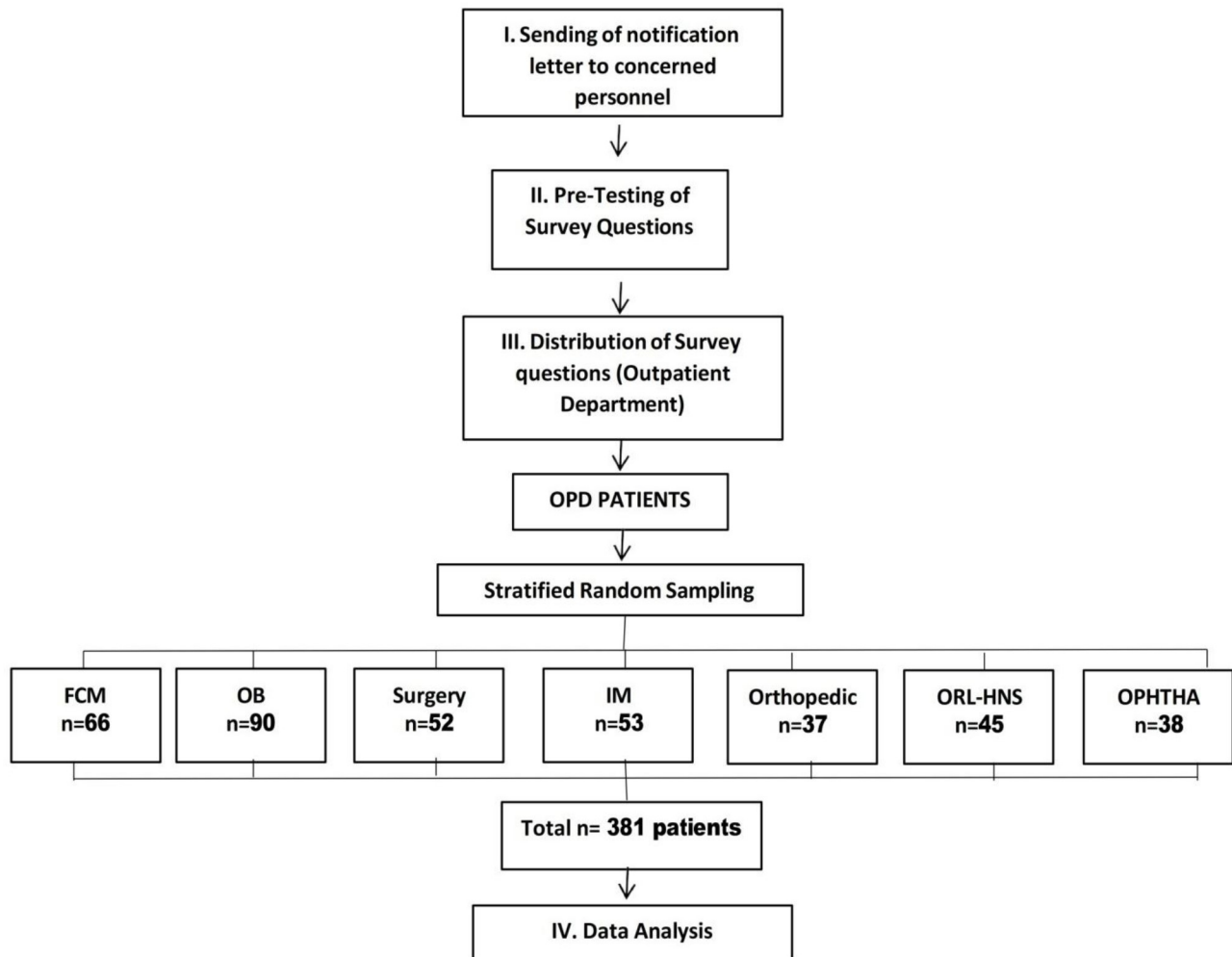
4. Post-operation patients with inability to write without companion
5. Stretcher-borne patients
6. Patients with blindness without companion
7. Pediatric patients

SAMPLE SIZE

The sample size was based on the service outpatient census of the year 2019. A total of 37,634 individual coming from the combined departmental census was used. Since there was no locally available frequency of Health-related internet usage, an estimated frequency of 50% was used at 95% confidence interval, resulting to 381 samples computed from Open Epi Online calculator.

SAMPLING METHOD

The service patient population included only the following departments: 1-Family and Community Medicine, 2-Obstetrics and Gynecology, 3-Surgery, 4-Internal Medicine, 5-Orthopedics, 6-Otorhinolaryngology Head and Neck Surgery, 7-Ophthalmology. Study participants from each department were selected via Stratified random sampling based on the highest monthly census from the previous year (October 2019). The computed samples per department were as follows: Family and Community Medicine=66, Obstetrics and Gynecology=90, Surgery=52, Internal Medicine=53, Orthopedics=37, Otorhinolaryngology Head and Neck Surgery=45, Ophthalmology=38.

DATA COLLECTION PROCESS DIAGRAM

PART I. Notification letters were furnished by the researcher and sent to the medical director and other concerned institutional officers informing them of the study information to be forwarded to the concerned department heads.

PART II. Pre-testing of the questionnaire was done at the service outpatient department of De La Salle University Medical Center. A total of 21 respondents were given the study questionnaire. The 21 respondents were equally distributed among the departments included in the study (3 patients for each department). Each participant was asked to sign an informed consent and given the

questionnaire with the printed instructions of the study. The participants were given 30 minutes to complete the questionnaire and were returned to the researcher or the research assistant. The result of the initial pre testing showed that participants had difficulty in following the instructions on skipping some survey questions (Question 9 and 18 of the survey questions) hence the instructions for skipping were marked and enlarged. Furthermore, the researcher or research assistant reminded the instructions to the participants on the actual data collection.

PART III. The study was conducted at the service outpatient department of De La Salle University Medical Center for 1 month and had been approved by the institutional technical and ethics review board. During the triaging of the patient, each patient was numbered accordingly per department. Participants received a brown envelope labeled with a unique ID number assigned by the researcher per patient containing the questionnaire, informed consent, and printed instructions of the study. Each patient was asked to sign an informed consent prior to inclusion to the study. For patients with writing disability, the companion or caregiver answered in behalf but the researcher and assistant made sure that the answer still came from the patient. The researcher and assistant dispersed the questionnaires among the consenting subjects: Each participant was allowed to answer the questionnaire for 30 minutes and the completed survey questions were collected immediately by the researcher or research assistant. All questionnaires were collected and checked for completeness by the research assistant or researcher. Answered questionnaires were placed in the same envelope and collected upon completion.

DATA COLLECTION TOOL

The survey questions were based on the 41-item internet questionnaire by Alghamdi and Moussa (Appendix H). The said questionnaire was validated in Saudi Arabia and was pilot tested prior to administration to study participants. However, the result of the pilot testing was not provided by the authors.

The research article and internet questionnaire were acquired through the library services of the Romeo P. Ariniego MD library clinical key subscriptions upon the request of the researcher. The said questionnaire was utilized in the outpatient department of a hospital in Saudi Arabia hence some items were not applicable in

the local setting. The researcher modified the questions accordingly: survey items and questions in the said questionnaire were re-arranged and some survey questions were added, altered or deleted based on the suggestions of consultant in the Department of Family and Community Medicine of De La Salle Health Medical and Health Sciences Institute, resulting to a 33-item survey questions. The modified questionnaire (English Version) was then submitted for translation to Tagalog version to the College of Liberal Arts and Communication of De La Salle University-Dasmariñas thru Ms. May L. Mojica, a Filipino academician who had Master of Arts in Filipino and Doctorate degree of Philosophy in Philippine Studies-Language, Culture and Media. The completed Tagalog version (**See Appendix A**) of the modified questionnaire was utilized on the target population at the outpatient department.

The 33-item translated survey questions were subdivided into 6 parts:

1. Demographic Profile
2. Extent of internet Usage
3. Sources of Medical Information
4. Health-related Internet use Experience
5. Reasons for health-related Internet Use
6. Effects of Health-related Internet use

The first part was about the demographic profile or personal information of the respondent such as (1) age, (2) sex, (3) marital status, (4) highest educational level, (5) household average monthly income, (6) occupation, (7) residence, and (8) frequency of visit to the doctor.

The second part was about the respondent's extent of internet use (Questions number 9-16). Included information are the following: (9) usage of the internet (10) usage of email, (11) language/s used during 8 searches, (12) type of internet connection, (13) devices used during internet use,

(14) location of internet use, (15) number of monthly medical websites visited, and lastly (16) frequency of internet use for medical information per month.

The third part (Questions 17-21), included the (17) main sources of medical information, (18) health-related internet usage by the respondent, (19) medical websites used for searches, (20) types of information being search in the internet and (21) criteria for choosing the website or medical information for health-related Internet usage.

The fourth part of the questionnaire was about the internet experience (Questions number 22-25). Included questions were on (22) reliability of online medical information, (23) application of online medical information without consulting a doctor, (24) online purchase of medicines and lastly, (25) procurement of online herbal treatments. Likert scale (Always, Often, Sometimes, Rarely or Never) was utilized to measure each question.

The fifth part (Question 26) asked on what are the reasons for health-related internet use like wanting to learn more about the condition, not getting enough information from the doctor, not convinced by the information given by doctor and lastly other reasons for health-related internet use. At the end of the section (Question 27-33), respondents were asked if internet use to obtain medical information were useful, harmful or neither harmful nor useful (27). Succeeding questions included (28) adequacy of medical information from the internet, internet search before coming to the clinic (29), discussion of information gathered from internet to the doctor (30), effect of discussion of information with doctor on medical condition (31) and relationship with doctor (32). The last question for effect, asked if after consultation, respondent would still search from the internet for medical information (33).

DATA ANALYSIS

All data collected from the questionnaires were encoded using Microsoft Excel. The data collected were reported as frequencies and percentage distribution; nominal data were arranged from the highest to lowest frequency.

BIOETHICAL CONSIDERATION

The research protocol was evaluated by the Institutional and Ethics review board and Data Privacy Office of the De La Salle Medical and Health Science Institute. The study was approved for implementation on September 23, 2020 with Independent Ethics Committee Protocol Tracking No. 2020-070-A. Prior to the implementation of the questionnaire, informed consent (**See Appendix B**) was elicited from all the respondents and confidentiality of test results were protected and preserved in accordance with the Data Privacy Act of 2012.

RESULTS

The study included 381 participants. The sample size was computed based on the Service Outpatient Departmental Census of 2019. Response rate was 100% and all questionnaires distributed were returned.

A. Demographic Profile

Most of the respondents belong to the 26-35 age group (32%), were females (69%), married (49%), high school graduates (32.02%), unemployed (43.31%), no income (58 %), living in urban places (56.69%) and only had visited a doctor once (58.01 %). (**See Table 1.0**)

B. Extent of Internet Use

Majority of the participants used the internet (88.98%). Of the internet users, most have emails (72.30%); utilized English as their main language when browsing (63.44%). Mobile data and mobile phone were the primary form

of internet connection & device used (59.71%, 78.06% respectively) and most used the internet at home (56.83%). Most individual utilized less than 5 websites every month for internet searches (59.71%) and most health-related searches were 1-5 times per month (57.19%). (See Table 2.0)

C. Sources of Medical Information

The primary source of medical information was from Doctors (76.25%) and followed by internet sources (20.31%). Other respondents also mentioned other Medias such as radio and TV programs as source of their medical information (3.44%). (See Figure 1.0)

D. Health-related Internet Usage

Among the internet users, health-related internet use was prevalent (78.42% 266/339). Most of the medical information seekers utilized commercial websites such as Google and Yahoo during their online searches (See Figure 2). Most of the health-related searches focused on respondent's medical condition (36.22%), followed by searching about the medical condition of a family member (35.20%) and lastly on general medical information (28.57%). The criteria used by respondents to evaluate the quality of information from the internet includes: Design of the websites (22.86%), belonging to a medical institution (26.49%), majority (29.61%) stated that they do not trust information unless it comes from a doctor and some considered the internet as a reliable source of medical information (21.03%). (See Table 3.0)

E. Experience on Health-related Internet Use

Most of the participants stated they sometimes trust information from the internet (58.63%) followed by those who always trust the internet for medical information (25.90%).

Many stated they sometimes applied the medical information obtained from the internet without consulting a doctor fewer than those who never applied the information (45.32% vs 34.17%). Lastly, online buying of medications and herbal treatments were not prevalent among the group (0.72%, 1.44% respectively). (See Table 4.0)

F. Motives for Health-related Internet Use

Participants stated that their primary reason for health-related internet use was personal learning about medical condition (57%) followed by lack of information from doctor (26%) and lastly, lack of confidence from doctor's information (15% 40/266). Other reasons (2%) were: "some doctors from public hospitals do not provide adequate answers to queries", "searching for first aid to simple illnesses", "easy access to internet sources", "convenience" and "additional knowledge on a particular disease". (See Figure 3.0)

G. Effect of Health-related Internet Use

Respondents stated that medical information coming from the internet was useful to them (68%) followed by those who think it is neither useful nor harmful (29%). And few seem to think medical information obtained from internet sources were harmful (3%). Regarding the adequacy of Medical information from the internet, many find it partially enough (44%) compared to those otherwise find it is very deficient (38%), and very few find it enough (11%). Before consultation with a doctor, majority did not do health-related searches compared to those who did (52% vs 48%). Ask regarding if they did share the information with the doctor, most responded that they did not disclose it to the health practitioner (64%). Most of the participants also believed that Health-related searches do not have effect on their medical condition (62%) and their

relationship with their doctor (61%). Lastly, asked if after doctor consultation, many participants stated that they would not do Health-related internet searches compared to those who will search for additional medical information (54% vs 46%). (See Table 5.0)

DISCUSSIONS

The study described the health-related internet use of patients in a subset of population attending a private institution particularly patients consulting at the service outpatient department of De La Salle University Medical Center, Cavite, Philippines. The prevalence of Health-related internet usage was high at (78.42%) along with those who have Internet access (88%). The number of Internet users in the outpatient department was higher than the Philippines' Internet Penetration rate (67%) shown by the Digital2020 report done by Simon Kemp but comparable with the Internet usage report shown on the Philippines National Demographic and Health Survey 2017 and by the study of Cooley showing 89% had internet access and searches for health information online. Another comparable study was by Schwartz (2006) reported that majority of their respondents (74%) who had internet access and had used the internet to find health information for themselves or in behalf of a family member focusing on disease-specific information. However, several studies also showed a lower internet usage among patients (1,15,19). The high usage of the internet for health information in the local setting poses a risk for possible proliferation of incorrect medical information by unvalidated online sources.

The high internet usage in study may be attributed to the current pandemic in which many people were advised to stay at home due to lockdown protocols and quarantine measures. This is supported by the study result showing that Internet usage was highest at Home (56.83%). Another reason is that most individual included in

the study belongs to the younger age group of 18-25 & 26-35 years old (23% & 32%), several studies showed that younger age group was associated with higher Health-related searches (1,10,16,17). Among the internet users, Mobile phone and data were also the most commonly used device/mode during online searches (78%). This is lower than the observed mobile internet user's prevalence (97%) in the Digital 2020 report on the Philippines but both significantly showed the importance of this device in accessing the internet for online inquiries in the local setting.

Despite the high internet usage, majority of participants (76%) identified that Doctors were their primary source of medical information as also seen in the other studies on health-related Internet usage (1,3,6,8). Although, the primary reason for health-related search was personal learning about their medical condition (57%). Some identified lack of information and unreliability of information from doctors as their motive for health related internet search (26%, 15% respectively). This may be attributed to limited real-time consultation and increased telemedicine consultation in which there is limited interaction between the patient and physician.

Another finding of the study is that commercial websites with search engines such as Yahoo, Google were the most used during health-related searches. This is similar with the Digital 2020 report on the Philippines which showed that Google.com & Yahoo.com were included among the TOP 5 mostly used website with the highest monthly traffic (Rank 1 for Google and Rank 5 for yahoo). Search engines were also the predominantly used websites during health-related searches in different studies (8,15,19). The study also showed that most of the participants searched about their medical condition (36.22%) followed by searching about the medical condition of a family member (35.20%) and lastly on general

medical information (28.57%). Most of them based their choice of website on whether the information was from a medical institution more than the design of the website. Also most subjects expressed that they do not trust information unless it comes from a doctor and but respondents still trust the internet as source of medical information. Regarding Internet experience, the study showed that half of the respondents sometimes trust (58.63%) and applied the information gathered from online sources without consulting a doctor (45.32%). Online purchases of medications or herbal products were uncommon in the study group. Many study participants viewed that information gathered from the internet regarding health useful (68%) but stated that it's only partially sufficient (44%). Few studies showed the same result, in which participants believed the usefulness of online information^(1,19). And half did not seek Health- related information from the internet prior to their doctor visit (52%). Ask regarding if information obtained was shared to Doctor during consultation, most signified that they do not disclose it to their physician (64%). Hence the belief of the majority of respondents that Health-related searches did not have an effect on their medical condition (62%) or their relationship with their physician (61%). The non-disclosure of medical information coming from the internet to Physician was also fairly common among patients^(4,19). Lastly, regarding Health-related Internet usage, most won't do online searches for medical information after consultation (54%).

LIMITATIONS

Many studies had been done abroad regarding how patients utilized the Internet for medical information or Health-related Internet Usage but this study served as the pioneer study in the Philippines concerning this widely used and growing health seeking behavior among patients. Despite a small sample size compared to other similar studies on health-related internet usage;

this study selected the study participants via stratified sampling method increasing it reliability and representation of the sample population. Although done in a pandemic setting, the researcher was able to complete the distribution of the questionnaire in the outpatient department with strict observance of health protocols.

CONCLUSIONS

The study clearly showed that Health-related Internet Usage was predominantly done in the outpatient department prior to medical consultation. A majority of individual had searched the Internet for medical information citing several reasons which may affect their medical condition and their relationship with their physician. Although, majority of the patients stated that their Doctors were the primary source of medical information. Most of the patients still trust the information coming from Internet sources and find it useful. Moreover, many do not disclose it to their physician. It is recommended that as primary care physician, inquiry regarding the health related internet usage be done on every patient since medical information obtained from the internet can be erroneous which may affect the medical condition of the individual. Also during inquiry, physician can correct misperception and relieve anxiety from online medical information thus strengthening the doctor- patient relationship.

The majority use commercial websites with search engines for obtaining medical information followed by webpages of doctors, medical associations and hospital, and few utilized social networking sites for medical information. And the most common mode of access is via mobile phone using mobile data and usually done at home. Sadly, majority of those doing Health-related searches on the internet, believe that it does not affect their medical condition and their relationship with their doctor. Hence, Health practitioners and institutions can utilize these

websites or design mobile applications to further enhance their medical services through providing easy access to adequate and correct online medical information to patients.

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CONFLICT OF INTERESTS: No relevant disclosures

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Table 1.0 Demographic Profiles of Patients ≥ 18 years old in the Service Outpatient Department of De La Salle University Medical Center, October 2020, n=381.

Variables	Frequency	Percentage
1. Age group (in years)		
18-25	89	23.36
26-35	122	32.02
36-45	45	11.81
46-55	80	20.99
56-65	45	11.81
2. Sex		
Male	117	30.71
Female	264	69.29
3. Marital Status		
Married	188	49.35
Single	142	37.27
Divorced	21	5.51
Widowed	15	3.94
Separated	15	3.94
4. Highest Educational Attainment		
Elementary undergraduate	3	0.79
Elementary graduate	13	3.41
High School undergraduate	16	4.19
High School graduate	122	32.02
College undergraduate	89	23.4
College graduate	110	28.87
Vocational Course Graduate	28	7.32
5. Household Average Monthly Income		
No income	219	57.48
Less than 5,000 Pesos	43	11.29
Between 5,000 and 10,000 Pesos	74	19.42
Between 10,000 and 15,000 Pesos	26	6.82
Between 15,000 and 20,000 Pesos	7	1.84
More than 20,000 Pesos	12	3.15
6. Occupation		
Unemployed	165	43.31
Employed	130	34.12
Student	54	14.17
Self-employed	32	8.40
7. Residence		
Urban	216	56.69
Rural	165	43.31
8. Number of Doctor visit		
Once	221	58.01
Two to five times	126	33.07
More than 5 times	34	8.92

Table 2.0 Frequency and Percentage Distribution of the Internet Users, Email Users, Language, Type of Internet Connection, Device, Location, Number of Monthly Website and Number of Monthly Health-related searches among Patients ≥ 18 years old in the Service Outpatient Department of De La Salle University Medical Center, October 2020, n=339

Variables	Frequency	Percentage
1. Internet Users	339/381*	88.98
2. Email Users	245	72.30
3. Language Used		
English	215	63.44
Filipino	124	36.56
4. Type of Internet Connection		
Mobile Data	202	59.71
Wireless (Wi-Fi)	96	28.42
DSL	40	11.87
5. Device used during searches		
Mobile Phone	265	78.06
Computer (Laptops/Desktops)	62	18.35
IpAD/Tablets	12	3.60
6. Location of Internet Use		
Home	193	56.83
Mobile phone	93	27.70
Work	49	14.39
Internet café	4	1.08
7. Number of Monthly Websites usage		
None	132	38.85
Less than 5 websites	202	59.71
Five or more websites	5	1.44
8. Number of Monthly Health-related internet searches		
None	116	34.17
Less than 5 times	194	57.19
Between 5 and 20 times	24	7.19
More than 20 times	5	1.45

NOTE: * This is the total participants included in the study, of which 339 were the internet users in the group. Non-internet users were told to skip questions on items 2-8

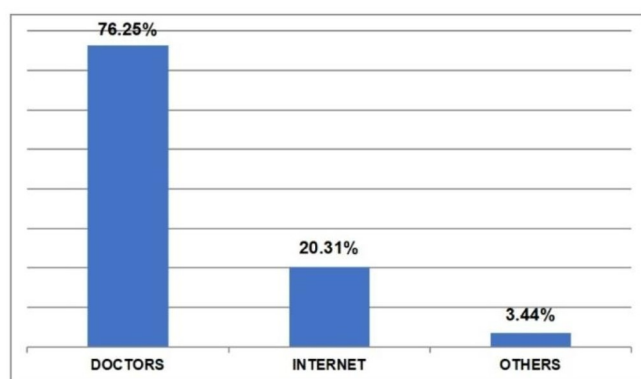
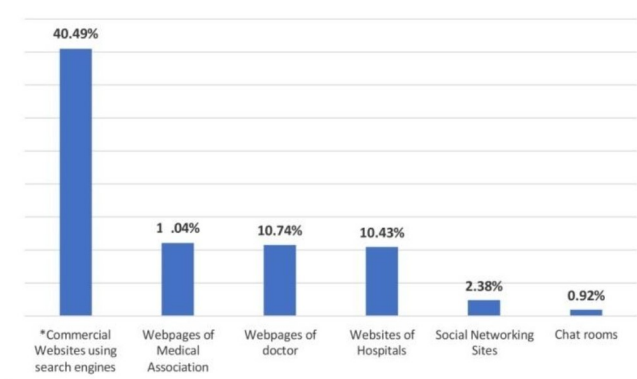


Figure 1.0 Sources of Medical Information among Patients ≥ 18 years old in the Service Outpatient Department of De La Salle University Medical Center, October 2020, n=381



* Commercial websites are defined as websites using search engines like Google and Yahoo

Figure 2.0. Type of Websites Used by Patients ≥ 18 years old in the Service Outpatient Department of De La Salle University Medical Center, October 2020, n=339

Table 3.0 Frequency and Percentage distribution of the Type & Criteria of Medical Information obtained from the Internet, used by Patients ≥ 18 years old in the Service Outpatient Department of De La Salle University Medical Center, October 2020, n=266*

Variables	Frequency	Percentage
1. Type of Information being search		
Medical Condition	96	36.22
Medical Condition of other member of the family	93	35.02
General Medical Information	77	28.76
2. Criteria/Evaluation of Information from the Internet		
Design of website		
I do not trust information unless it was from a doctor	79	29.61
Belonging to a medical Institution	70	26.49
Design of website	61	22.86
I trust any information obtained from the Internet	56	21.03

NOTE: * This is the number of individuals who do Health-related Internet usage among the internet users

Table 4.0 Frequency and Percentage Distribution of Reliability of Medical Information, Application of Medical Information, Online purchase of Medicines & Herbal Treatments by Patients ≥ 18 years old in the Service Outpatient Department of De La Salle University Medical Center, October 2020, n=266*

Variables	Frequency N=266	Percentage
1. Trust in the information from the Internet		
Always	69	25.90
Often	13	5.00
Sometimes	156	58.63
Rarely	13	5.00
Never	15	5.47
2. Application of Internet Information without consulting a doctor		
Always	7	2.51
Often	24	9.00
Sometimes	120	45.32
Rarely	24	9.00
Never	91	34.17
3. Buying Medicines online		
Always	2	0.72
Often	2	0.72
Sometimes	7	2.75
Rarely	6	2.25
Never	249	93.56
6. Buying Medicinal Herbal treatments online		
Always	4	1.44
Often	3	1.00
Sometimes	19	7.25
Rarely	2	0.82
Never	238	89.49

NOTE: * This is the number of individuals who do Health-related Internet usage among the internet users

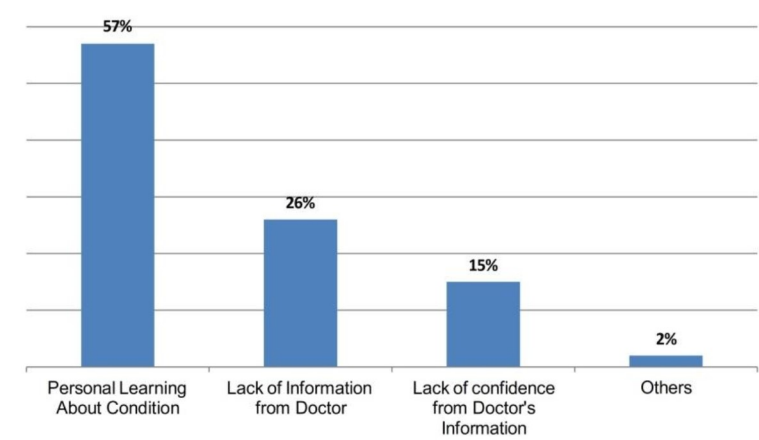


Figure 3.0 Reasons for Health-related Internet Usage of Patients ≥ 18 years old in the Service Outpatient Department of De La Salle University Medical Center, October 2020, n=266

Table 5.0 Frequency and Percentage distribution on the Effect of Health-related Internet usage, Adequacy of Medical Information from the internet, Health-related Internet usage before and after Clinic Visit, Sharing of Medical Information to doctor, and effect of Health-related use on Medical Condition and Doctor-Patient relationship among Patients ≥ 18 years old in the Service Outpatient Department of De La Salle University Medical Center, October 2020, n=266*

Variables	Frequency	Percentage
1. Effect of Internet Use on Medical Condition		
Useful	181	68
Harmful	8	3
Neither	77	29
2. Adequacy of Medical information from the internet		
Enough	29	11
Partially Enough	117	44
Deficient	19	7
Very Deficient	101	38
3. Health-related Internet Usage before clinic visit		
No	138	52
Yes	128	48
4. Sharing Medical Information obtained from the internet to Doctor		
No	170	64
Yes	96	36
5. Effect of Health-related internet usage to condition		
No effect	165	62
Positive effect	90	34
Negative effect	11	4
6. Effect of Health-related internet usage to doctor-patient relationship		
No effect	162	61
Positive effect	93	35
Negative effect	11	4
7. Health-related Internet usage after clinic visit		
No	144	54
Yes	122	46

NOTE: * This is the number of individuals who do Health-related Internet usage among the internet users