A STUDY OF WEBSITES IN DISSEMINATION OF INFORMATION AMONGST MEDICAL PRACTITIONERS PRACTICING IN MULTI-SPECIALTY HOSPITALS IN NAVI MUMBAI)

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Abstract: This is an era of information explosion which is greatly fueled by internet and online means of communication. Updates on recent advances in medicine are made every day. **Aims & objectives:** The study is a descriptive survey conducted among medical practitioners to find out the popular websites, mode, manner of use & time spend, extent of its use, current usage trends, up-gradation of their knowledge & skills, particular advantages for improvement in techniques, authenticity and precautionary measures while using the websites. **Materials & Methods:** 200 medical practitioners with at least a postgraduate degree and practicing in multi-specialty hospitals in Navi Mumbai a questionnaire based on 19 questions- Likert Scale was used to analyze the respondent's data. **Result** was calculated by detailed analysis- methods of SPSS used - Chi square test showed significant value $P < 0.05$ & its Correlation, Group Statistics, Independent Samples Test, and Cross tabulation tests. It showed 91 gave first preference to Facebook & least to Blogging services as 2. The Websites used once a week and preferred search engines Google

87. The purpose for using online forums as listed by practitioners was 66 for update of MCI guidelines while least as 1 to provide contact details of physicians. Resources preferred during diagnosis and to learn some new technical knowledge or skills were 44 for online means & 28 only offline means. **Conclusion**: All these variables are directly proportional to each other and are linked to patterns of usage and habits of professionals regarding their preferences while using online sources of information.

KEYWORDS: Authentic, e-learning, Medical Practitioners, Quality, Websites.

INTRODUCTION

 Internet is a fast-growing preferred medium of gaining and transforming knowledge by the quickest means possible. Websites offer a plethora of information regarding recent research about different aspects of medicine, such as drug development, improved techniques, and the latest patient data analysis, which helps healthcare providers to improve the quality of medical services they render to their patients, which potentially saves lives of patients and also helps in providing better palliative care.
 Multi-specialty hospitals are well known for having well equipped clinics and labs to carry out various examinations and tests. It is of almost essential that the websites catering to the needs of medical practitioners be authentic as it will affect the quality of healthcare provided to patients at hospitals. In order to bring about proper diagnosis of the illness the patient is suffering from the knowledge regarding such techniques and advanced tools necessary for accurate diagnosis must be quite up-to-date.

Websites may act as an important source of knowledge for such purpose.This study is an attempt to understand the extent of use of websites, to quantify and judge the quality of websites used by medical practitioners with finding the perceived authenticity, satisfaction level of physicians with available online content, and existing lacunae present in the online system of dissemination of knowledge amongst practitioners.

OBJECTIVES

1. To study the popular websites and the extent of use of those websites by medical practitioners & to explore the current trend of use of websites
2. .To analyse the mode, manner of use, and time spent on websites by medical practitioners for up-gradation of their knowledge & skills.
3. To find out improvement in technique and skill.to medical practitioners using websites
4. To find out the number of websites referred to as authentic by medical practitioners and websites used to suggest precautionary measures while using the websites.

MATERIALS AND METHODS

Central Theme: to find out the kind and pattern of the trend observed in using websites by medical practitioners working in Multi-Specialty Hospitals in Navi Mumbai.

Research Technique: The researcher plans to undertake questionnaire-based surveys to analyze the website usage of medical practitioners after the personal interview of 20 medical practitioners consisting of a structured validated questionnaire based on 19 questions- Likert Scale was used to analyze the respondent's data. All the items were measured on a 5 point likertscale:-1 (strongly disagree), 2 (disagree), 3 (neutral),4 (agree) &5 (strongly agree)..The study design is descriptive for analysis purposes.

The questionnaire & interview framed were comprised of two main sections

1) First section comprised of Personal information which was designed to know the demographic variables of the respondent professionals.
2) The second section of five sub sections and the variables within each sub section were framed to extract abstract variables influencing area of study under the concerned project i.e.Website & Current Trends, Mode/Manner of Use/Extent of Use/ Skills/Advantages/Purpose,Authenticity and Recommendations. Each of variables are contributes several elements to analyze nd record the variables influencing the objectives of the present research.

Population: The population considered for the study of medical practitioners with at least a postgraduate degree and practicing in multi-specialty hospitals in Navi Mumbai.

Inclusion Criteria: Medical practitioners working in multi-specialty hospitals in Navi Mumbai.

Exclusion Criteria: Undergraduate students, Postgraduate students, Ayush doctors, Paramedical staff & students, dental students & dentists.

Sample: The study included a convenience sample. The sample size is 200, questionnaire contains 19 questions on- Likert Scale.

Study Design: Retrospective quantitative content analysis of purposive randomly selected responses.

Hypothesis Testing

H0: Regularly updated authentic websites do not help medical practitioners to update their knowledge and improve their skills.

H1: Regularly updated authentic websites help medical practitioners to update their knowledge and improve their skills

For calculating detail analysis methods of SPSS used - Chi-square test, Correlation, Group Statistics, Independent Samples Test, and Cross tabulation

Period: 2 Months**, Place of Study:** Navi Mumbai

OBSERVATIONS AND RESULTS

The questionnaire was sent to a total 300 medical practitioners through email and 50 hard copies personally handover with an intention to have about 200 sample size for current study.

128 male respondents and 72 female respondents agreed to participate in the study **(graph 1a).**

The study had respondents as postgraduates as well as senior faculty working at MGM Group of Hospitals, Navi Mumbai, taking in account diverse ages as well as different generations of doctors for comparison.

The observation and results are based on primary data collected through a questionnaire by the researcher. The reliability and validity of the data collected are presented in **Tables 1-8**.

Table 1 Reliability Statistics

Cronbach's Alpha	No. of Items
0.830	13

The Cronbach's alpha values for all the 13 variables are shown

Table 2: Item Statistics

	Items	Mean	Std. Deviation	N
1.	Which are the websites you use at least once a week (Rank the options according to your preference)	2.87	2.156	200
2.	What are your preferred search engines while searching for knowledge (theoretical) and / technical based content:	2.11	1.102	200
3.	What is your frequency of use of websites: (Per Day)	1.91	1.052	200
4.	Do you prefer to follow: (Rank according to your preference)	2.35	0.793	200
5.	Do you prefer to access internet/ websites/Online forms while(Rank according to your preference)	2.84	0.907	200
6.	What is your preferred device for accessing information available on internet: (Per Day)	2.09	1.304	200
7.	What is your purpose for using online forum? (Rank according to your preference)	3.24	2.803	200
8.	If you want to learn some technical knowledge or skills which resources would you prefer over the other (Rank according to your preference)	2.44	1.362	200
9.	If you want to revise some technical knowledge or skills which resources would you prefer over the other? (Rank according to your preference)	2.23	1.399	200
10.	While attempting to diagnose 'unusual' cases would you diagnose on the basis of information provided by : (Give Rank according to your preference)	2.43	1.262	200
11.	What is your observation regarding intervals of website updates?	3.45	1.773	200
12.	Do you feel Websites serve expected purpose:	3.44	0.906	200
13.	Do you often get clickbaited while searching for information on online forms.	2.48	0.891	200

The above table shows mean,standard deviation for the item in questionairefor 200 according to likert scale..

Table 3: Chi-Square Tests

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	89.313[a]	32	0.000
Likelihood Ratio	37.189	32	0.242
Linear-by-Linear Association	0.090	1	0.765
N of Valid Cases	200		
a. 35 cells (77.8%) have expected count less than 5. The minimum expected count is .01.			

The second phase of data analysis is to assess the internal reliability of the measuring instrument, which is used to test the variables in the model and to prove the data is 'true data'. This was done by calculating coefficient scores using the software SPSS version 20.0. It is presented in tables -Reliability Statistics, Cranach's alpha values, Item Statistics, Scale Statistics. T-Test: In the above analysis, the researcher fails to reject the null hypothesis since the F-value is 0.945 and its associated significance value is 0.333, which is greater than 0.05. The T value is 0.250, and the associate significance value is 0.803; therefore, we do not reject the null hypothesis for equality of means. Chi-square test : In the above analysis, the researcher found that the value of Pearson Chi-Square is 89.313, and the associated significance value is 0.000, which is less than 0.05. Therefore, the null hypothesis is rejected, and we say there is an association between Q1 and Q2.

The significant variables are found to be directly related to each other using tests such as the Chi-square test, Correlation, Group

Statistics, Independent Samples Test, and Group Statistics, Cross tabulation are:

1. Websites used once a week and purpose for using an online forum
2. Frequency of use of websites and purpose of use of websites

3. Observation regarding website updates and purpose for using an online forum
4. Advice preferred from which source during diagnosis and method preferred to revise existing knowledge
5. Advice preferred from which source during diagnosis and method preferred to learn technical knowledge
6. Method preferred to learn technical knowledge and preferred time to access internet/websites

Data Analysis and Evaluation

Table No 4: Analysis on the basis of Gender

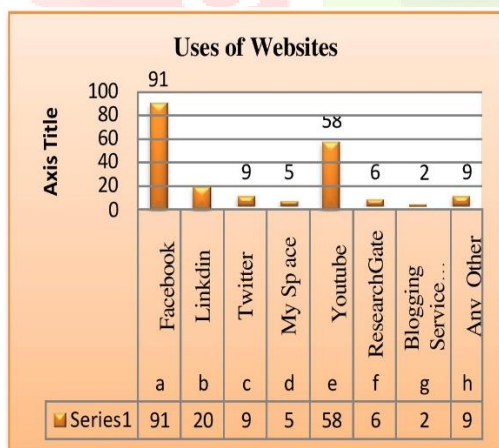| Sr. no.	Particulars	Responses
1	Male	128
2	Female	72
	Total	200

In above table showed, out of 200, 128 were males and 72 were female

Table No 5: Analysis on the basis of Educational Qualification

Educational Qualification:		
Sr. no.	Particulars	Responses
1	Graduate	39
2	Post Graduate	161
	Total	200

Above table showed, about 161 post graduate residents and 39 faculties from diverse specialties participated in the study, from which, 128 were males and 72 were females.

**Graph 1 & Table No 6: Analysis on the basis of Uses of Websites**

1	Which are the websites you use at least once a week (Rank the options according to your preference)	
Sr no	Particulars	Responses
a	Facebook	91
b	Linkdin	20
c	Twitter	9
d	MySpace	5
e	You tube	58
f	Research Gate or Academia	6
g	Blogging Services	2
h	Any Other	9
	Total	200

It was found out that regarding use of websites, 91 respondents gave first preference to Facebook, 20 respondents to Linkedin, 9 respondents to Twitter, 5 respondents to MySpace, 58 respondents to Youtube, 6 respondents to Research gate, 2 respondents to Blogging services, rest visited other resources atleast once a week

Graph 2& Table No 7: Analysis on the basis of Preference of search engines
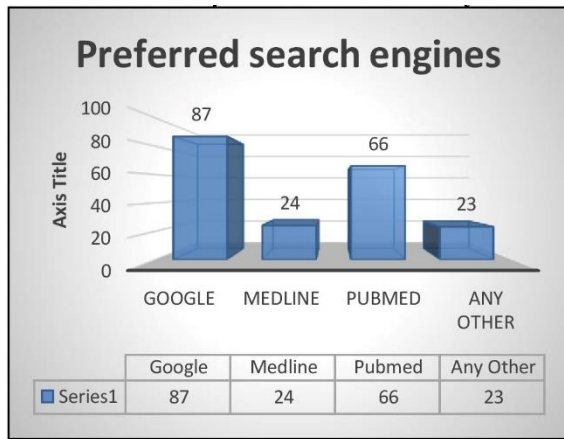
Preferred search engines	Google	Medline	Pubmed	Any Other
Series1	87	24	66	23

| 2		What are your preferred search engines while searching for knowledge (theoretical) and / technical based content:	
	Sr. no.	**Particulars**	**Responses**
	a	Google	87
	b	Medline	24
	c	Pubmed	66
	d	Any Other	23
	Total		**200**

The search Engines having top preference are in order of Google leading with 87 respondents giving them first preference, Pubmed getting 66 respondents, Medline getting 24 respondents and other search engines being used by rest 23 respondents. Amongst other search engines Duckduckgo was listed as top preference by 20 respondents

**Graph 3 & Table No 8: Analysis on the basis of Frequency of Use of Websites**

Frequency of use of websites: (Per Day)	1 to 2 Hours	2 to 4 Hours	4 to 6 Hours	More than 6...
Series1	93	56	26	25
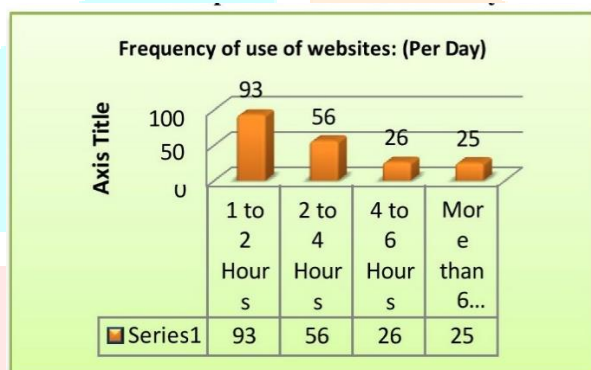
What is your frequency of use of websites: (Per Day)		
Sr. no.	**Particulars**	**Responses**
A	1 to 2 Hours	93
B	2 to 4 Hours	56
C	4 to 6 Hours	26
D	More than 6 Hours	25
Total		**200**

The time taken by most practitioners on internet at a stretch was another variable, with most practitioners devoting 1-2 hours (93 respondents) 2-4 hours (56 respondents) 4-6 hours (26 respondents) more than 6 hours (25 respondents).

**Graph 4 & Table No 9: Analysis on the basis of Preferences**
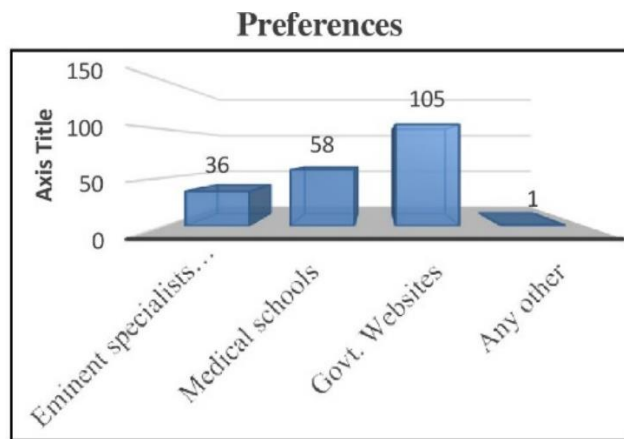
Preferences

	Do you prefer to follow: (Rank according to your preference)	
Sr.no.	Particulars	Responses
a	Eminent specialists related / belonging to your field of specialization	36
b	Medical schools	58
c	Govt. Websites	105
d	Any other	1
	Total	**200**

It has been observed that 36 respondents follow eminent specialists, 58 respondents follow medical institutes/ schools and 105 respondents follow government websites on first preference basis.

Graph 5 & Table No 10: Analysis on the basis of Frequency of Use of Websites
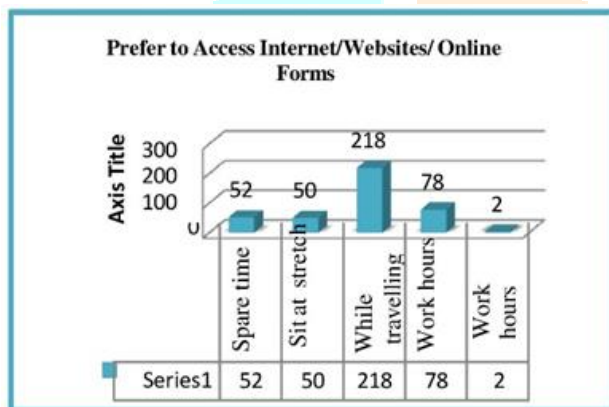
Prefer to Access Internet/Websites/ Online Forms

	Do you prefer to access internet/ websites/Online forms while(Rank according to your preference)	
S. no.	Particulars	Responses
a	Spare time during clinic/consultation	52
b	Sit at a stretch using preferred device	50
c	While travelling	218
d	Work hours	78
e	Non-work hours	2
Total		**400**

The habits of internet usage that are observed are that 52 practitioners access internet during spare time during consultation/ clinic, 50 respondents like to sit at a stretch using preferred device, 218 respondents access during travelling, 78 respondents during working hours and 2 respondents during non working hours.

Graph 6 & Table No 11: Analysis on the basis of Frequency of Use of Websites
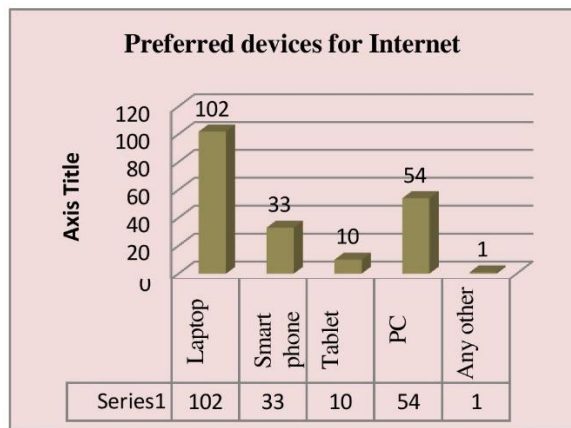
Preferred devices for Internet

Sr. no.	What is your preferred device for accessing information available on internet: (Per Day)	
	Particulars	**Responses**
A	Laptop	102
B	Smartphone	33
C	Tablet	10
D	PC	54
E	Any other	1
Total		**200**

|	Laptop	Smart phone	Tablet	PC	Any other
Series1	102	33	10	54	1

The devices listed as first preferred to access these websites are Laptop with 102, Smartphone with 33, Tablet with 10, PC with 54 and other preference by 1

Table No 12: Analysis on the basis of Frequency of Use of Websites

Sr. no.	What is your purpose for using online forum? (Rank according to your preference)7	Responses
	Particulars	**Responses**
A	MCI guidelines	66
B	Law	48
C	Social activity	24
D	Latest research	18
E	Latest/ trending journals	7
F	Tutorials from other eminent / renowned specialist	10
G	Latest technological advancement	6
H	Orientation/refresher courses	7
I	To reach correct diagnosis	5
J	Past your own tutorial blog	2
K	Socio-medical campaigns & programs	3
L	To create platform for patients to access contact details of physicians	1
M	Any others	3
Total		**200**

The purpose for using online forum as listed by practitioners are (66 respondents) to keep updated about MCI guidelines, (48 respondents) to keep updated about law, (24 respondents) for social activity, (18 respondents) for latest research, (7 respondents) for latest/ trending journals, (10 respondents) for tutorials from eminent specialist, (6 respondents) to keep track of latest tech advancement, (7 respondents) for orientation/ refresher courses, (5 respondents) to reach correct diagnosis, (2 respondents) to post own tutorial blogs, (1 respondents) to provide contact details of physicians and (3 respondents) listed other reasons.

Graph7 & Table No 13: Analysis on the basis of Frequency of Use of Websites
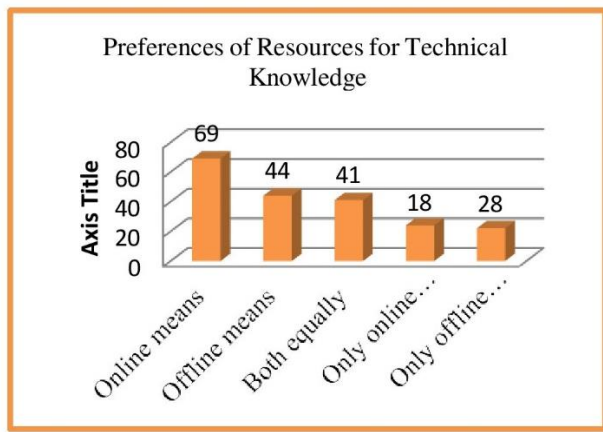

Preferences of Resources for Technical Knowledge

If you want to learn some technical knowledge or skills which resources would you prefer over the other (Rank according to your preference)8		
Sr. no.	Particulars	Responses
A	Online means	44
B	Offline means	69
C	Both equally	41
D	Only online means	18
E	Only offline means	28
Total		**200**

For practical learning, online means are preferred by 44 respondents, offline by 69 respondents, exclusively online by 18 respondents, exclusively offline means by 28 respondents and both equally by 41 respondents.

**Graph 8 & Table No 14: Analysis on the basis of Frequency of Use of Websites**
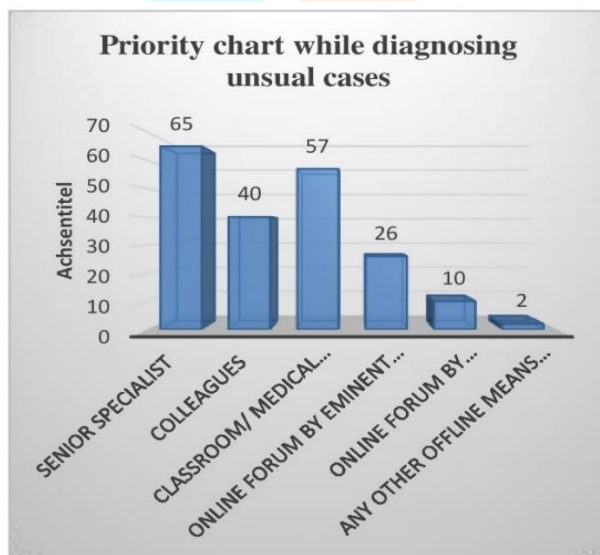
Priority chart while diagnosing unsual cases

While attempting to diagnose 'unusual' cases would you diagnose on the basis of information provided by : (Give Rank according to your preference)		
Sr. no.	Particulars	Responses
a	Senior Specialist 1	65
b	Colleagues 3	40
c	Classroom/ medical school teaching experience 2	57
d	Online forum by eminent specialist	26
e	Online forum by renowned university	10
f	Any other offline means or Forum: (Please Specify)	2
Total		**200**

While attempting to diagnose unusual cases first preference by practitioners for attempting diagnosis or for asking advice was given to senior specialist by 65 respondents, colleagues by 40 respondents, classroom experience by 57 respondents, online forum by specialist by 26 respondents, online forum by university 10 respondents, any other offline means by 2 respondents.

Graph 9 & Table No 15: Analysis on the basis of Frequency of Use of Websites
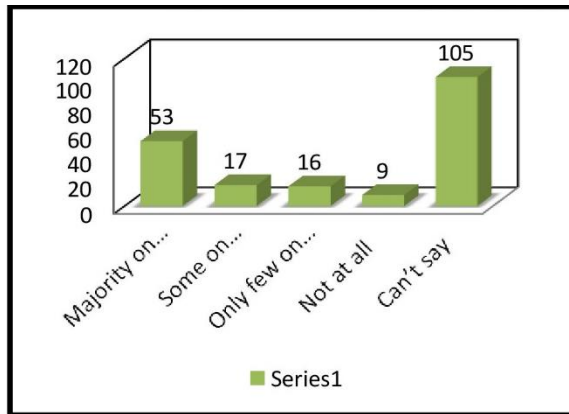
What is your observation regarding intervals of website updates?		
Sr. no.	**Particulars**	**Responses**
A	Majority on regular basis	53
B	Some on regular basis	17
C	Only few on regular basis	16
D	Not at all	9
E	Can't say	105
Total		**200**

Practitioners rated the websites being updated as majority on weekly basis by 53 respondents, some on weekly basis by 17 respondents, only few on regular basis by 16 respondents, not at all by 9 respondents and can't say by 105 respondents

Table No 16: Analysis on the basis of Frequency of Use of Websites

	you feel Websites serve expected purpose:	
Sr. no.	**Particulars**	**Responses**
A	Strongly disagree	5
B	Disagree	10
C	Neutral	111
D	Agree	42
E	Strongly agree	32
Total		**200**

Most of the practitioners on being asked if websites serve expected purpose answers were strongly disagree by 5 respondents, disagree by 10 respondents, Neutral by 111 respondents, Agree by 42 respondents and Strongly agree by 32 respondents

Table No 17: Analysis on search of clickbaited on online forms

	Do you often get clickbaited while searching for information on online forms.	
Sr.no.	Particulars	sponses
A	Too much	3
B	Sometimes	132
C	Rarely	44
D	No	3
E	Can't say	18
Total		200

Above table showed regarding clickbaits, 3 respondents rated it as too much, 132 respondents as sometimes, 44 respondents as rarely, 3 respondents as no, and 18 respondents as can't say

DISCUSSION

The study found out that amongst respondents, all of them had their permanent or temporary residential address as Navi Mumbai and had a range of experience from minimum of 3 years in residency till atleast 20 years of experience in clinical work. About 161 post graduate residents and 39 faculties from diverse specialties participated in the study, from which, 128 were males and 72 were females.

A large number of medical professionals take this advantage of websites for professional purposes. Li X, Gray K, Verspoor K, Barnett S showed that online social networks enable health professionals to learn informally for sharing knowledge or discussing practice management challenges and clinical issues .This correlated with the findings as the statistics found out in the study strongly hinted at patterns regarding usage of websites pertaining to social media in most of the professionals

In this study it was found out that regarding use of websites, 91 respondents gave first preference to Facebook, 20 respondents to Linkedin, 9 respondents to Twitter, 5 respondents to MySpace, 58 respondents to Youtube, 6 respondents to Research gate, 2 respondents to Blogging services, rest visited other resources atleast once a week. Facebook, Youtube, Linkedin, are popular websites that are used for online means of communication as well as to run various short vlogs in which the concerned person could publish short clips of various procedures.

In a quantitative study conducted by Grajales F, Sheps S, Ho K, Novak-Lausch in 2014 showed that the role of social media in the medical and health care sector is far-reaching, in terms of governance, ethics, professionalism, and information quality with Both traditional as peer-reviewed and newer methods like policies, case studies, and social media content through 76 articles, 44 websites, and 11 policies/reports sources were used showed blogs , microblogs, Facebook LinkedIn, Wikipedia, HealthMap, YouTube, Slideshare were commonly used

The search Engines having top preference are in order of Google leading with 87 respondents giving them first preference, Pubmed getting 66 respondents, Medline getting 24 respondents and other search engines being used by rest 23 respondents. Amongst other search engines Duckduckgo was listed as top preference by 20 respondents. Usually research is not taken up as an interest popularly by clinicians. Hence there is more popularity of search engines such as google to solve clinical diagnosis related dilemmas which are far more common in practitioners than using specialized search engines such as Pubmed or Medline, as these can be used to only read or keep up with latest research. So considering their specificity and in general lack of textual and clinical information in desired format, usually Google is preferred. Simila review by Patel SS, Majhail NS Micro-blogging platform Twitter has been used by blood and marrow transplant physicians over the last several years with increasing enthusiasm. Wikipedia employed in medical education with proper planning and instructional design, reviewed by Rasmussen .

Relevance of videos retrieved using the moderation service was higher compared to the relevance of the videos retrieved using the YouTube search engine.According to the Pew Research Statistics Center, 79% of adults who are online use Facebook, 76% of whom access the site daily through Centre PR .social media update 2016. website.

The time taken by most practitioners on internet at a stretch was another variable, with most practitioners devoting 1-2 hours (93 respondents) 2-4 hours (56 respondents) 4-6 hours (26 respondents) more than 6 hours (25 respondents). This variable is completely related to individual habits and online lifestyle of the respondents. Lack of time to sit at a stretch to read online forums is a crippling factor present in study.
It has been observed that 36 respondents follow eminent specialists, 58 respondents follow medical institutes/ schools and 105 respondents follow government websites on first preference basis. This corresponds to the perceived authenticity of information published by these forums,obviously the higher numbers of followers following authentic sites of information. Also interest in governance and latest rules put forth by the government is far more considered to be important by the study respondents. Hence the observed bias.

The habits of internet usage that are observed are that 52 practitioners access internet during spare time during consultation/ clinic, 50 respondents like to sit at a stretch using preferred device, 218 respondents access during travelling, 78 respondents during working hours and 2 respondents during non working hours. These again come in the purview of individual habits as they exist of doctors engaged in using online forums. Here, the time spent in travelling is greater for respondents in study hence to utilize time, online forums are accessed during travelling. There is no general bias in whether the practitioners would prefer to use these forums during

clinics or outside clinics. This is correlated with the review article on Health Care Professionals to Create Virtual Communities by Rolls K, Hansen M, Jackson with 72 research studies published between 1990 and 2015 concluded that – 22 for Listservs ,18 for Twitter, 17 for general social media, 7 for discussion forums, 3 for Web 2.0 & virtual community of practice ,1 for wiki and Facebook in all.2017 review article by Petrucci M ,Chand M,Wexner SD outlined the various platforms for social media as a tool in surgical education .

The devices listed as first preferred to access these websites are Laptop with 102, Smartphone with 33, Tablet with 10, PC with 54 and other preference by 1. Again this question relates to habits as well as finance that is available to such practitioners.

The purpose for using online forum as listed by practitioners are (66 respondents) to keep updated about MCI guidelines, (48 respondents) to keep updated about law, (24 respondents) for social activity, (18 respondents) for latest research, (7 respondents) for latest/ trending journals, (10 respondents) for tutorials from eminent specialist, (6 respondents) to keep track of latest tech advancement, (7 respondents) for orientation/ refresher courses, (5 respondents) to reach correct diagnosis, (2 respondents) to post own tutorial blogs, (1 respondents) to provide contact details of physicians and (3 respondents) listed other reasons. Here we can observe tremendous bias towards reading habits over publishing habits of practitioners, with only 2 respondents preferring to publish information while others use internet to gain information. The preference leans towards government websites, social activities and research.The researchers Dr. Rachel Moon and colleagues in 2012 only analyzed the first 100 websites identified by each of the thirteen Google searches (total of 1300 websites). Only 43.5% of these 1300 websites contained recommendations that were in line with the AAP(American academy of paediactrics) recommendations, while 28.1% contained inaccurate information and 28.4% of the websites were not medically relevant.

In present study for practical learning, online means are preferred by 44 respondents, offline by 69 respondents, exclusively online by 18 respondents, exclusively offline means by 28 respondents and both equally by 41 respondents. These statics show the changing preference of medical practitioners towards online means of gaining knowledge but yet the offline means is still considered better by many.While attempting to diagnose unusual cases first preference by practitioners for attempting diagnosis or for asking advice was given to senior specialist by 65 respondents, colleagues by 40 respondents, classroom experience by 57 respondents, online forum by specialist by 26 respondents, online forum by university 10 respondents, any other offline means by 2 respondents. Here it is not always possible to know correct diagnosis through online means by lack of specific searches in time as compared to books and consultation which is always at hand and ready for the concerned respondents, hence the statics point towards the same direction.Practitioners rated the websites being updated as majority on weekly basis by 53 respondents, some on weekly basis by 17 respondents, only few on regular basis by 16 respondents, not at all by 9 respondents and can't say by 105 respondents. The comment was that usually the practitioners notice lack of updated knowledge when it is grossly incorrect and inaccurate. This is far worse as they in spite of such browsing behaviour rate the websites to less updated and therefore lose interest. This is a vicious cycle- as lack of interest continues the few dedicated websites further become just as disinterested as its predecessors due to lack of response.

Most of the practitioners on being asked if websites serve expected purpose answers were strongly disagree by 5 respondents, disagree by 10 respondents, Neutral by 111 respondents, Agree by 42 respondents and Strongly agree by 32 respondents. As there is lack of knowledge and communication with regards to website that are useful, there is redundancy in websites that are less useful being accessed often, causing less satisfactory experience. However the verdict of the respondents remains neutral. Which points as improvement over other common conceptions.Regarding clickbaits, 3 respondents rated it as too much, 132 respondents as sometimes, 44 respondents as rarely, 3 respondents as no, and 18 respondents as can't say. Clickbaiting is another form of major inconvenience which cannot be completely avoided due to commercialization. However by being selective with search words these may be reduced. Also by using paid version of free apps, advertisements and clickbaits reduce significantly.

Regarding authenticity of websites, majority of the respondents were of opinion that online forums are not authentic sources of gaining and revising new skills. This is because multitude of reasons including lack of proper sources, incorrect and outdated information on official websites and some sources using names similar to authentic sources to gain more views leading to lack of accurate and authentic information available on net

In a study by Leo, LeKouge, Leriani, Niederman in 2006 stated for information & knowledge purpose online sites like -10.8% use Uptodate ,8.4% use Medscape ,5.5% use Webmd ,4.7% use Mdconsult and 2.9% use Emedicine . 19.7% use Pubmed, 3.9% use Ovid were used.In the study online forums perceived as authentic

are ICMR Websites, Websites pertaining to national and international medical schools and universities and articles searched through Medline and Pubmed. These are authentic and reliable sources proven by the history of their creation, purpose and are widely popular for persons engaged in research due to its ease of search regarding references.

The medical news shared online by government websites is mostly perceived as authentic and accurate. Most of the practitioners suggest that there should be an increase of interest in both reading as well as publishing community online so as to make it a reputable and increase the interest of online publishers so that it will be of interest to them to maintain the levels of accuracy in their websites.The problems and issues that practitioners face while using online means of gaining information include- irrelevance of searches, clickbait, inaccurate and/or outdated information, along with possibility of fake websites publishing incorrect information especially to sell certain services or products.

CONCLUSION

- Online sources having top preference are Google, Pubmed, YouTube, Facebook, Linkedin, etc.
- The respondents follow eminent specialists, medical institutes/ schools, and government websites to know about governance and the latest rules.
- There is no general bias in during clinics or outside clinics. However, standard clinical procedures were reviewed online (in video format) for students' benefit.
- The devices listed as first preferred to access Laptops, Smartphones, Tablet, & PC to keep updated about MCI guidelines, law, social activity, latest research, and tutorials from an eminent specialist to keep track of the latest tech advancement for orientation/ refresher courses, to reach a correct diagnosis, to post own tutorial blogs, to provide contact details of physicians and other reasons.
- While seeking advice regarding diagnosis preferences were senior specialists, colleagues, classroom experience, an online forum of specialists, the university, and any other offline means.
- Few thought online forums were not authentic sources of gaining and revising new skills due to lack of proper authority, incorrect and outdated information, and lack of accurate and authentic information, while the majority were in favor or neutral.

Conflicts of interest

    There are no conflicts of interest.

QUESTIONNAIRE:

"A Study of Uses of Websites in Dissemination of Information Amongst Medical Practitioners Practicing in Multi-specialty Hospitals

in Mumbai"

1. Name _____ 2. Age_____

3.Gender: Male_____ Female_____Anyother_____

4.Qualification _____

5. Experience:

6. Position_____

7.Name and Address of Place of Practice: _____

A) Website & Current Trends

1. Which are the websites you use at least once a week (Rank the options according to your preference) Face book _____

Linkedin_____ Twitter _____ MySpace_____ Youtube_____ Research Gate or

Academia_____ Blogging services _____ Any Other : (Please specify) _____

2. What are your preferred search engines while searching for knowledge (theoretical) and / technical based content: Google_____

Medline_____ Pubmed_____ Any other_____

3. What is your frequency of use of websites: (Per Day) 1 to 2 hours _____ 2 to 4 Hours _____ 4 to 6 Hours_____

More than 6 Hours _____

4. Do you prefer to follow: (Rank according to your preference) Eminent specialists related / belonging to your field of

specialization_____ Medical schools _____ Govt. Websites _____ Any other Eminent specialists related / belonging to your field of specialization _____ Medical schools _____ Govt. Websites _____ Any other _____

B) Mode/ Manner of Use / Extent of Use :

5. Do you prefer to access internet/ websites/Online forms while(Rank according to your preference) Spare time during clinic/consultation_____ Sit at a stretch using preferred device _____While travelling _____ Work hours _____ Non-work hours _____ Spare time during clinic/consultation_____ Sit at a stretch using preferred device _____ While travelling _____ Work hours _____ Non-work hours _____

6. What is your preferred device for accessing information available on internet: (Per Day)

Laptop_____

Smartphone _____

Tablet_____

PC _____

Any other_____

C) Skills/ Advantages/ Purpose:

7. What is your purpose for using online forum? (Rank according to your preference) MCI guidelines _____ Law _____ Social activity _____ Latest research _____ Latest/ trending journals _____ Tutorials from other eminent / renowned specialist_____ Latest technological advancement _____ Orientation/refresher courses _____ To reach correct diagnosis _____ Past your own tutorial blog _____ Socio-medical campaigns & programs _____ To create platform for patients to access contact details of physicians_____ Any others _____

8. If you want to learn some technical knowledge or skills which resources would you prefer over the other (Rank according to your preference) Online means _____ Offline means _____ Both equally _____ Only online means _____ Only offline means _____

9. If you want to revise some technical knowledge or skills wIf you want to learn some technical knowledge or skills which resources would you prefer over the other (Rank according to your preference) Online

means_____ Offline means _____ Both equally _____ Only online means _____ Only offline means _____

10. While attempting to diagnose 'unusual' cases would you diagnose on the basis of information provided by : (Give Rank according to your preference) Senior Specialist _____ Colleagues _____ Classroom/ medical school teaching experience _____ Online forum by eminent specialist _____ Online forum by renowned university _____ Any other offline means or Forum: (Please Specify)_____

11. Do you feel online forums provide healthy atmosphere for resolving conflicts of interest? Yes/ No: Give reason--
_____
_____

12. What is your observation regarding intervals of website updates? Majority on regular basis_____ Some on regular basis _____ Only few on regular basis_____ Not at all _____ Can't say _____

13. Do you feel Websites serve expected purpose: Strongly disagree _____ Disagree_____ Neutral _____ Agree _____ Strongly agree _____

14. Do you often get clickbaited while searching for information on online forms. Too much_____ Sometimes_____ Rarely_____ No_____ Can't say_____

D) Authenticity:

15. Do you consider online forums to be authentic source of gaining and revising technical knowledge & skills: Yes / No (Justify your answer)
_____
_____

16. State the online forums which according to your opinion provide authentic, reliable and up-to-date information regarding your specialty? Yes /No (Justify your answer)_____
_____

17.Do you consider medical news shared on online platforms to be misleading in nature? Yes /No (Justify your answer)_____
_____

18. What measures will you suggest to improve and maintain authenticity of information available on online forms?_____
_____

E] Recommendation:

19. Did you ever receive any particular recommendation of online forum pertaining to your speciality? through the options given below. Face book _____
Linkedin_____ Twitter_____ MySpace_____ YouTube_____ Research Gate or Academia _____ Blogging services _____ Any Other _____

20. Would you personally recommend medical professionals to use online means of gaining theoretical knowledge and technical skills and to revise already existing knowledge and skills using online means? Yes / No (Justify your answer)

21. State problems & issues faced while using websites

22. What are your suggestions to improve the use of websites for professional up-datation& skills

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