ORIGINAL ARTICLE

Perceptions of Medical and Dental Doctors on Dealing with 'Google Informed Patients'

ABEER ANJUM¹, REMSHA MUSTAFA¹, SADIA RANA², KHIZAR ANSAR MALIK³, SHAKEEL AHMAD⁴, USMAN MAHBOOB⁵, AYESHA FAHIM°

¹Assistant Professor Medical Education, Khawaja Safdar Medical College, Sialkot, Pakistan

²Associate Professor Oral Biology, Sharif Medical & Dental College, Lahore, Pakistan

³Assisstant Professor Medical Education, University College of Medicine & Dentistry, Lahore, Pakistam

⁴Associate Professor Oral & Maxillofacial Surgery, Islam Dental College, Sialkot, Pakistan

⁵Associate Professor Medical Education, Khyber Medical University, Peshawar, Pakistan

⁶Associate Professor Oral Biology, University College of Dentistry, University of Lahore, Pakistan

Correspondence to: Ayesha Fahim, Email: Ayesha.fahim@ucd.uol.edu.pk, Cell: 03325334893

ABSTRACT

Objective: To explore the perceptions of the health professionals regarding internet health-seeking behaviour of patients and problems faced by recent medical and dental graduates.

Methods: Eight General physicians and six dental surgeons from different regions of Sialkot and seven recent medical and dental graduates were selected via purposive sampling technique. Data was collected through semi-structured interviews over the phone with prior appointments. Manual qualitative thematic analysis was performed by transcribing the interviews and then codes, subthemes, and themes were generated.

Results: Six themes and sixteen subthemes were identified depicting the perceptions of physician and problems faced by recent medical and dental graduates, namely: doctor-patient relationship enhanced (due to patients presenting better history, improved communication, and consultations in a healthy environment), Time saved in consultations (makes the task easier, informed patients are helpful and give better results), Threat to patient safety (self-medication, on-compliant to medicines and advices and understanding issues) difficult to counsel(information overload), Frustration (patients stick to conclusions, lack of understanding) and Professional disregard (as patients challenge physician authority, defamation, change their doctors, lack of trust)

Conclusion: The theatrical increase of patients' access to internet health information has caused unpredictable quality impacts on the doctor-patient relationship. Future recommendations have been suggested to overcome the challenges faced by health professionals due to the online searching behaviour of patients and hence improving the health outcomes.

Keywords: doctor-patient relationship; general physician; recent medical graduates; the internet informed patients.

INTRODUCTION

Health-related information is a progressive and more accessible topic to over 3.2 billion individuals who have access to the web worldwide. Over half of Belgian persons (56%) uses the web, anecdotally referred to as 'Dr Google' to collect health-related material. The Doctor-patient relationship is very important for the perseverance of the treatment of the patient and should trust each other so that better patient outcome is achieved.

In today's world, the Internet suggests easy access to health-related data, physicians increasingly have to deal with the patients who bring along information from the Internet without knowing that the information is true or not. This information sometimes causes discomfort to the doctor as the patient might judge the ability of his doctor, or self-medicate, sometimes change their physician, or even misjudge or diagnose their disease. Due to all these factors, patient safety is compromised.

At times it becomes difficult for a doctor to counsel the patient that whatever the doctor is saying is of complete benefit to the patient and sometimes the doctor-patient relationship is compromised. Doctors when asked that how they deal with these patients who search 'Google', specified that they feel threatened and also that their professional expertise has been disregarded. The unwanted information compromises the time of the doctor and other patients as well. 3

Since 'Google' offers a wide range and convenient access to health-related material, doctors increasingly have to face the patients who search online and bring their queries into consultations. Recently there is a shift of power from the uninformed patients to more empowered ones who can better take care of themselves. At one point informed patients communicate well, conversely, sometimes it is linked with misleading or unreliable information. Previous studies show concerns regarding pointless discussions, time-consuming dialogs, managing with vague questions, and organizing confused and misinterpreted data all of which are a challenge to doctors.

Furthermore, the doctor-patient relationship is harmed due to misleading information, wrong interpretations, and fabricated

discussions by the patients. With this shift from detached and silent patients to the enabled ones, doctors might have a problem with this new collaborative role where the physicians' authority is challenged. Hence the questions emerge that how doctors experience the patients who bring along data from the web, the amount of misjudged information, time spent in consultations, lack of trust in physicians, and loss of physicians control and authority over patients. Doctors' perspective is therefore very important to explore because we cannot harm any patient and we want to make sure that patients' safety is the utmost priority.

MATERIAL AND METHODS

A basic qualitative study was conducted at Allama Iqbal Memorial Teaching Hospital for recent medical graduates and General Practitioner were sorted from the periphery of Sialkot. The duration of the study was 8 months.

Participants: A purposive sample of eight general practitioners and seven recent medical graduates was selected. General Practitioners from the periphery of the Sialkot region because they are most likely to receive the bulk of rural patients who are internet informed but ignorant. Recent medical graduates are best suitable for study as they are new to doctor-patient encounters and might have difficulties facing them.

Data collection: Semi-structured interviews were preferred to collect data in which a set of open-ended questions were asked from general physicians and recent medical graduates on the telephone. The questions were validated by two experts in the field of medical education and piloted by one RMG and one GP to ensure clarity. After taking informed consent from the members, an arrangement for the meet was settled agreeing to the accessibility of the interviewees. The anonymity and confidentiality of participants were maintained.

Data analysis: Manual thematic analysis was done by following the six steps of Kiger. All the audio-recorded tapes were transcribed on the same day by the first author and then sent to the second author. Transcripts were read several times to get familiarization with data then inductive coding was done through

the first and second cycle of coding. The codes were merged to form subthemes and themes

RESULTS

Overall six themes and sixteen subthemes were identified out of which two depict the perceptions of physicians and four themes depict the problems faced by recent medical graduates.

Demographhics of participants are shown in table 1.

Table 1: Demographics of the participants of the study.

Designation	Setting	Male	Female
08 general	Periphery of Sialkot	05	03
practitioner			
07 recent medical		05	02
graduates	Sialkot		

Table 2: Perceptions of Physicians Regarding Internet Health seeking behaviour of patients.

Theme	Subtheme	Representative quote	
Doctor-	Presents a better history and prompt	"Well-informed patients help in the making of prompt diagnosis as he presents his history	
patient	diagnosis	better".(Gp.02)	
relationship enhanced	Improved communication	"Informed patients are helpful when they have the right information as it saves my time with diagnosis and treatment can be started earlier than expected so the doctor-patient relationship gets	
		better."(Gp.01)	
		"You get relieved that you don't have to explain more to a patient and your patient is on the right	
	Consultations in a healthy	path and up to mark and your consultations are conducted in a healthy and good environment so	
	environment	you are at ease if the patient is well informed. (Gp.02)	
	Makes task easier	"Yes I really feel happy because it makes my task easier and time-saving I don't have to waste my	
		time in explaining the whole disease whole treatment options or pathology behind it."(GP.08)	
	Informed patients are helpful	"Informed patients are helpful when they have the right information as it saves my time with	
Time saved		diagnosis and treatment can be started earlier than expected"(Gp.05)	
in	Better results	" informed patient has the right information about his signs and symptoms, it saves time and	
consultation		normally leads to better results. (Gp.03)	

Table 3: Problems faced by recent medical graduates in dealing with google informed patients.

Theme	Subtheme	Representative quote	
Threat to patient safety		"Google is not that bad but I would say about the self-medication aspect that overdose or	
	Self-medication	underdose just by searching on the net, this should be discouraged" (HO.02)	
	Non-compliant with medicines and	"Such patients usually stick to their information whether right or wrong and normally they are non-	
	advices	compliant to the medicines or lifestyle modification advised to them"(HO.02)	
		"The difficulty is in terms that patient comes that patient says we have already used certain	
		medicines and cream and are not willing to understand that there are several other medicines for	
	Understanding issues	the same disease so they create difficulties."(HO.05)	
		"Sometimes it becomes hard to convince such patients as they don't buy your arguments no matter	
		how valid points you present to them, whatever information they have is always right to	
Difficult to	Information overload	them"(HO.01)	
counsel			
	Stick to their conclusions	"The patients are very over smart or try to act as if they know everything. They sometimes irritate	
		and bothers me, they are rigid about their believes"(HO.05)	
	Lack of understanding	"It irritates me as the patient has read so many things which are not useful clinically or read them	
		wrong or does not understands completely as there is a difference in bookish or googlish things and	
		clinical practice."(HO.03)	
Frustration			
		"It becomes quite difficult to entertain patients who come with information obtain via internet	
	Challenge physicians authority	because they think that information on the net is given by international doctors that are much more	
5		intelligent and experienced than the local doctors here".(HO.01)	
Professional		"There are many difficulties because they already know everything. For example, if they have	
Disregard	Change their doctors	stomachache they say that we have already used certain medication and they argue with you and	
		sometimes change their doctor".(HO.06)	
	Defamation	"Patients already knows very much about the disease and treatment but they don't know the	
		medical terms so it becomes very difficult to transcribe them every term they ask.".(HO.05)	
		"Patients' waste a lot of time by arguing or asking irrelevant questions they sometimes don't trust	
	Lack of trust	their physicians.".(HO.01)	

DISCUSSION

Current results showed that there is a threat to patient safety as patients self-medicate. The results are consistent with a longitudinal study conducted at The University of Amsterdam where according to a physician, patient who used the internet during their care had more negative views about medication. Another study in Canada claimed that "Internet information generated patient misinformation, leading to confusion, distress, or an inclination towards detrimental self-diagnosis and/or Self-treatment". 10

The doctor-patient relationship came out to be a new theme as previous studies doubted that internet information is more likely to create more problems. In another study in India, physicians perceived it pretty much good that internet-informed patients have more knowledge of health-related problems.¹

Time saved in consultations in our results is also backed by a study conducted in America where 1050 physicians were surveyed and twenty percent of them believed that bringing

internet information can help their time efficiency. Dr Google can save physicians time and patients costs as the number of visits may decline for patients having beforehand information.²

Patients with information overload are certainly difficult to counsel as this leads to state confusion in patients' minds and a difficult task for a physician to counsel. The findings were similar to a study conducted at The University Of Texas Austin where a physician was of the view that internet-informed patients believe that whatever they have searched is right, are difficult to counsel, and the patient is anxious and not ready to listen to their physician.

The frustration came out to be an important theme as doctors feel frustrated because patients stick to their conclusions and they fail to understand that everything on the internet is not true. A study titled "Are physicians ready for patients with internet-based health information" also expressed physicians' concern by giving reactions like "awkward"," hard time", "nightmare", "annoying", "irritating" and "frustrating". Moreover, the

argumentative and demanding behaviour of the patient results in anger, irritability, and frustration among doctors.⁶

Our study results revealed patients' challenging physician authority, lack of trust, change of doctors, and defamation all contribute to a professional disregard. A study in London also mentioned that physicians felt patients were challenging their authority with a confidence interval of 95%. Similarly, a study on haematologists revealed that patients don't trust their physicians.⁵ Patients ignore the expertise of the physician and don't trust them therefore the patient-physician relationship deteriorates.³ Likewise, "Physicians may feel a threat of losing control over the treatment process when the patient undermined their authority". Also bringing the online information into consultation may cause conflicts and patients tend to ignore the physicians' expertise.²

CONCLUSION

The theatrical increase of patients' access to internet health information has caused unpredictable quality impacts on the doctor-patient relationship. The physicians, at times do appreciate the searching behaviour as it might save their time in consultations also they consider that the doctor-patient relationship is enhanced as the patient provides helpful information that can lead to proper diagnosis and treatment. On the other hand, the recent medical graduates are felt that these patients are problematic, they don't trust their physician, they stick to their conclusion that can cause frustration, and also patients are difficult to counsel.

Ethical Approval: Éthical approval was taken from The University Of Lahore under (Registration no. ERC/04/20/11 on 17th November 2020).

REFERENCES

- Benetoli, A., Chen, T. and Aslani, P. How patients' use of social media impacts their interactions with healthcare professionals. Patient Educ Couns 2018,101(3),pp.439-444.
- 2 Chen Y, Li C, Liang J, Tsai C. Health information obtained from the internet and changes in medical decision making: Questionnaire development and cross-sectional survey. J Med Internet Res. 2018;20(2):e47
- 3 Ahmad F, Hudak P, Bercovitz K, Hollenberg E, Levinson W. Are physicians ready for patients with internet-based health information? J Med Internet Res. 2006;8(3):e22.
- 4 Sechrest R. The internet and the physician-patient relationship. Clin Orthop Relat Res. 2010;468(10):2566-2571.
- Wald H, Dube C, Anthony D. Untangling the web—The impact of internet use on health care and the physician-patient relationship.Patient Educ Couns.2007;68(3):218-224.
- Ahmad F, Hudak P, Bercovitz K, Hollenberg E, Levinson W. Are physicians ready for patients with internet-based health information? J Med Internet Res. 2006;8(3):e22.
- 7 Lu X, Zhang R, Wu W, Shang X, Liu M. Relationship between internet health information and patient compliance based on trust: empirical study J Med Internet Res. 2018;20(8):e253.
- 8 Kiger M, Varpio L. Thematic analysis of qualitative data: AMEE Guide No 131.MedTeach.2020;42(8):846-54.
- 9 Tan S, Goonawardene n. internet health information seeking and the patient-physician relationship: A systematic review. J Med Internet Res.2017;19(1):e9.
- Van Riel N, Auwerx K, Debbaut P, Van Hees S, Schoenmakers B. The effect of Dr Google on doctor-patient encounters in primary care: a quantitative, observational, cross-sectional study. BJGP Open. 2017;1(2):bjgpopen17X100833.