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To,

The Editor,

J-AMSA

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Respected Sir/Madam,

We are pleased to submit an original research article entitled **“IMPACT OF INTERNET GUIDED SELF DIAGNOSIS ON DOCTOR PATIENT RELATIONSHIP- A QUALITATIVE STUDY”** for consideration for publication in J-AMSA .

In this manuscript we have shown the various aspects of internet guided self-diagnosis. We did a qualitative study by interviewing consultants in different departments of Sri Guru Ram Das University of health sciences. Various thoughts and perceptions of the doctors on the subject were documented using a pre formed questionnaire and the repeated ideas and views were further studied and explored under five broad headings.

This paper was presented and highly appreciated at UNESCO endorsed international conference- ETHOS 2018 . We believe that this manuscript is appropriate for publication in J-AMSA as it will help in throwing a light on highly talked but relatively less studied subject and a subject of concern to almost all of the clinical departments. Our manuscript may even provide paradigm for future studies and awareness related to internet guided self-diagnosis.

The manuscript has not been published and is not under consideration for publication elsewhere.

Thank you for your consideration

Sincerely,

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IMPACT OF INTERNET GUIDED SELF DIAGNOSIS ON DOCTOR PATIENT RELATIONSHIP- A QUALITATIVE STUDY

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ABSTRACT

INTRODUCTION

The patient-physician relationship has been noted to be second only to family relationships in terms of importance. This relationship is based on trust of the patient on his physician. The growth of the Internet has enabled the public to more readily access information about health and disease. Patients use of the Internet in searching for and gathering health information is growing and has now become somewhat commonplace. Apart from many other issues created the central issue is the issue of trust on the doctor. . An earlier study done on the patient compliance related to internet guided self-diagnosis revealed online self-diagnosis has significant effects on patient compliance. So through this qualitative study we hope to explore all aspects of the internet related self-diagnosis in medical practice

OBJECTIVES

The OBJECTIVE OF THE RESEARCH IS TO STUDY THE IMPACT OF INTERNET GUIDED SELF DIAGNOSIS ON DOCTOR PATIENT RELATIONSHIP.THE OBJECTIVES ARE STUDIED UNDER THE HEADINGS OF-

- DIAGNOSIS
- REACTION
- PROBLEMS IN FURTHER MANAGEMENT
- COMPLIANCE TO PRESCRIPTION
- PERCEPTIONS/ FEELINGS
- ANY RECOMMENDATIONS

MATERIALS AND METHODS

The sampling frame consisted of 20 participating Doctors. The study participants were asked to fill a structured survey form, which consisted of ideal, interpretative and leading questions focussed on recording experience, opinions and perceptions. The recurrent views were identified and these similar views were used to answer the research questions.

OBSERVATION AND RESULTS

From this study it was found that all the study participants have encountered such a patient who came with an internet guided self-diagnosis. About three fourth of these doctors said that the self-diagnosis was incorrect. Further, according to the physicians majority of them said this lead to problems in further management. But surprisingly most of the physicians said the patients were compliant to their doctor's prescription even after doing the self-diagnosis. Our qualitative study also reviled a vast array of perceptions about the topic of study, these included absurdness, frustration, feeling irritated and many others.

CONCLUSION

Thus, from our study it can be said in conclusion that the internet guided self-diagnosis does not help the patient in any way instead in addition to causing problems in management also causes the straining of the doctor patient relationship. But still upon being counselled patient being compliant to the doctor reveals that the patients still trust the doctor more than the

internet which is accordance with an earlier quantitative research which we studied in our study of literature.

INTRODUCTION AND BACKGROUND

The doctor–patient relationship has been and remains a keystone of care: the medium in which data are gathered, diagnoses and plans are made, compliance is accomplished, and healing, patient activation, and support are provided¹The patient-physician relationship has been noted to be second only to family relationships in terms of importance. The benefits of this relationship can only be achieved if patients follow the treatment regimens relatively closely. This concept, known as compliance. Further this relationship is based on trust of the patient on his physician. Nowadays Internet has proven to be a powerful and very popular vehicle for distributing health information to millions of individuals; it is interactive, user-controlled, and provides an effective means for communicating detailed information.

The growth of the Internet has enabled the public to more readily access information about health and disease. Patient use of the Internet in searching for and gathering health information is growing and has now become somewhat commonplace². Available websites include those that provide possible diagnoses for particular symptoms and those that then assist people to decide whether to self-treat or consult a doctor.³ Patients nowadays even for a serious illness prefer to consult online health facilities rather than consulting a doctor, this leads to delayed diagnosis and treatment. Importantly, several studies show that Web-based health information frequently contains inaccurate or incomplete information. Patients who retain such information go so far as to suggest approaches to their physicians and express disappointment when the physicians refuse to prescribe as expected.⁴ Apart from many other issues created the central issue is the issue of trust on the doctor. This leads to straining of the physician patient relationship as the patient becomes non-compliant and the doctor becomes irritated. More of the available health information available on internet has also caused delayed consultancy by the patients leading to delayed diagnosis and treatment.

However to the best of our knowledge there has been no study or models studying the perceptions of physicians on the patients who came with the internet guided self-diagnosis. In fact little research (qualitative or quantitative) is available on the internet on the internet guided self-diagnosis. An earlier study done on the patient compliance related to internet guided self-diagnosis revealed online self-diagnosis has significant effects on patient compliance. Additionally, both physician quality and Internet health information quality have significant effects on patient-physician concordance, with physician quality exhibiting a much stronger relationship.² So through this qualitative study we hope to explore all aspects of the internet related self-diagnosis in medical practice. This study will help to know the perceptions of doctors on the same topic as well as their views on merits or demerits and how to handle such cases.

OBJECTIVE

The OBJECTIVE OF THE RESEARCH IS TO STUDY THE IMPACT OF INTERNET GUIDED SELF DIAGNOSIS ON DOCTOR PATIENT RELATIONSHIP.THE OBJECTIVES ARE STUDIED UNDER THE HEADINGS OF-

- **DIAGNOSIS**
- **REACTION**
- **PROBLEMS IN FURTHER MANAGEMENT**
- **COMPLIANCE TO PRESCRIPTION**
- **PERCEPTIONS/ FEELINGS**
- **ANY RECOMMENDATIONS**

MATERIALS AND METHODS

STUDY SAMPLE

The sampling frame consisted of 20 Doctors participating in a qualitative study “IMPACT OF INTERNET GUIDED SELF DIAGNOSIS ON DOCTOR PATIENT RELATIONSHIP”. Inclusion criteria for the study included at least one Doctor from each unit of the clinical departments of SGRD Hospital. The participants to the sample size were added until new opinions experiences and perceptions stop emerging from data.

SOURCE OF DATA

After giving the assurance of maintaining privacy and getting a written consent, the study participants were asked to fill a structured survey form (pic 1), which consisted of ideal, interpretative and leading questions focussed on recording experience, opinions and perceptions. Further PUBMED and EMBASE were searched electronically and bibliographies of articles searched manually for references from similar studies.

A SURVEY FOR QUALITATIVE RESEARCH
ON TOPIC “INTERNET GUIDED SELF DIAGNOSIS IN MEDICAL
PRACTICE-A QUALITATIVE STUDY”

(Confidentiality will be maintained)

Q) Have you ever encountered a patient who came with a preformed diagnosis made by him via google? Was the diagnosis made by the patient correct?

Q) How did you react/handle it?

Q) If preformed diagnosis was wrong, did this lead to any problems in the further management?

Q) Do such patients interfere in your diagnosis? Are such patients compliant to your prescriptions?

Q) What is your perception about such a practice? How do you feel?

Q) Any similar experience you would like to share?

Q) Anything you want to recommend to your fellow doctors regarding such practice?

PIC 1

DATA ANALYSIS

The survey data from each survey form was indexed. The framework for the qualitative study was selected that of ITEM ANALYSIS. Each survey form question was studied individually and a list of opinions, perceptions and experiences occurring in each question was made. Any example shared by the subjects was listed separately. Recurrent views from the made list were identified and these similar views were used to compile the results of research questions.

RESULTS

20 Clinicians in SGRDUHS shared their experience on the patients coming to their opd with an internet guided self-diagnosis via the survey questionnaire given to them. The results of the study were compiled under the broad headings of the theme of each questions asked in the questionnaire. The themes for the study of results are shown in Fig1

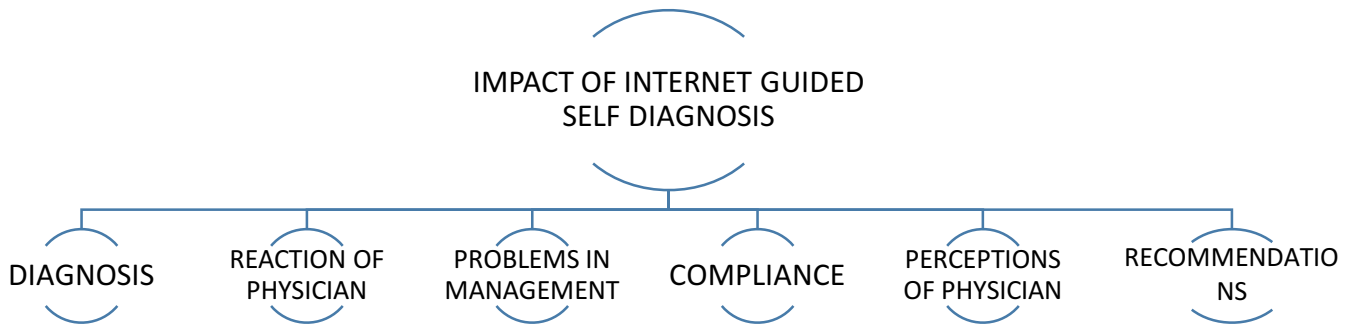


FIG 1

1. DIAGNOSIS

The answer to this theme was described by all the participants almost similarly that is, according to the physicians the condition and its cause diagnosed by the patient using internet is incorrect “most of the times”. However, one of the participants described the diagnosis as “sometimes suggestive but not correct”.

2. REACTION

Upon encountering such a patient, almost all the doctors reacted by **hearing calmly and the explaining about the disease in detail** .However, many of the doctors also counselled the patients and their attendants about the demerits of such self-diagnosis made via internet. One of the doctors said “ *I listen calmly and proceed with the investigations*”

3. PROBLEMS IN FURTHER MANAGEMENT

Under this theme the participants were asked if they faced a problem in further management of the patient due to the self-diagnosis. Almost equal positive and negative responses were obtained and for the negative responses the reasons were broadly divided into 4 sub categories shown in **FIG 2**

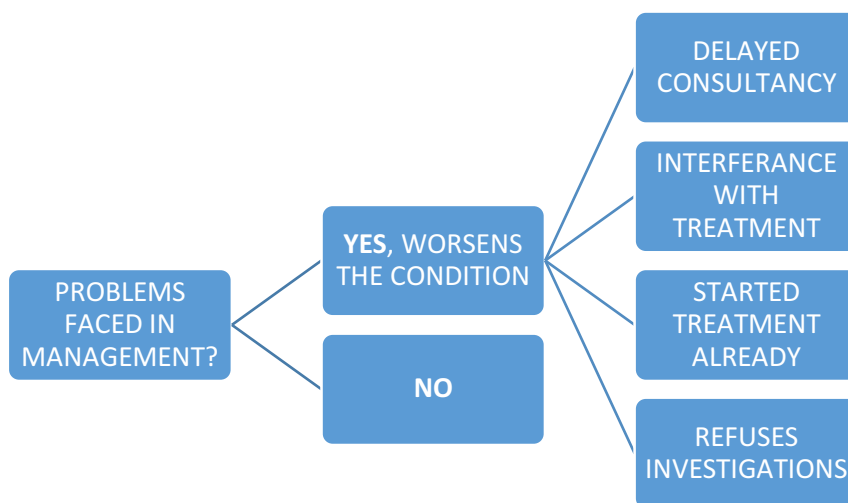


FIG 2

The participants who said they faced an issue with management that lead to worsening of condition

were also asked the reasons for the same and four reasons emerged among which interference with diagnosis (as told by 50% of those answering yes). However the other reasons were delayed consultancy, starting of self-treatment and refusal of investigations. One of the study participant expressed

“The patient feels as if he is being monetarily harassed by going through investigations”

Another physician shared one of his experience where the patient had already started the treatment as-

“One such patient I encountered had started on topical steroids for a fungal infection after reading on internet which lead to further worsening of the infection”

4. COMPLIANCE TO PRESCRIPTION

The views that emerged under this theme were both that of the patients being compliant as well as non-compliant. However, Most of the physicians expressed that such patients are compliant to the prescription upon being counselled about the disease its cause and course in detail. Two of the doctors also said that such patients are initially difficult to council as they have ***“already made their beliefs about the disease”***. One of the major view that emerged was that some of the patients are concerned about the adverse effects of drugs prescribed but were afterwards compliant on being properly explained about the conditions in which these ADRs would appear.

5. PERCEPTIONS/ FEELINGS

This theme had the most varied answers among all the themes and for each of the survey form analysed some new view appeared. The most common view that appeared was the doctors perceiving this as a *“wrong practice”*. The doctors felt it was *“taxing and frustrating”* and also *“absurd”*. The practice was described as *irritating and shame full*. One of the Physician expressed *“internet is not a replacement for medical practioner”*. Doctors also stressed on the easy availability of prescription medications which patients are able to procure over the counter that leads to self-treatment. However one of the study participant said it to be *Fine but should be in limits*. Some of the views given by study participants in their words are-

“Internet HYPNOTISES the patient and then it becomes difficult to remove their wrong perceptions”

“Patients should understand no diagnosis can be made without proper history taking, examination and investigations.”

“Medical science is not easy which one can understand by merely reading an article on the internet and make the diagnosis”

6. ANY RECOMMENDATIONS

In this study the participants were also asked what they would recommend to their fellow doctors and the recommendations obtained were not very different from one another. They advised that the doctor should *remain calm and explain about the disease in detail*. One of the doctors recommended that the *“doctor should work on generating an environment of trust between the doctor and the patient”*

EXPERIENCES

A couple of doctors also shared their experiences as

- 1. A patient with increased TSH after reading from internet started on antithyroid drugs because according to him his “THYROID HORMONES” were raised***
- 2. A patient with increased blood sugar after reading from internet started on Metformin but he***

ended up landing in lactic acidosis as he had increased creatinine levels

- 3. After reading from internet a patient used topical steroids for a fungal skin infection which lead to flaring of the infection***

DISCUSSION

So from our qualitative study revealed that according to the physicians the patients who come with a pre formed diagnosis made via internet are almost always wrong with their diagnosis. This wrong diagnosis creates a further problem in management of such individuals as the patient would not consult a doctor till a late time because he APPARENTLY knows his condition which may cause progression of the disease also such patients would first refuse investigations and then interfere with the treatment given by the doctor and recommend their own treatments, while there is also a set of patients who have already started the treatment leading to further worsening. Our study also focussed on the doctors' perception about this practice as discussed earlier there were varied perceptions and not a single qualitative finding was positive they were all negative(irritation, frustration, absurdness) with one of the perceptions being neutral(fine but should be in limits). Since, most of the doctors were frustrated or irritated by this, it shows this will lead to the straining of doctor patient relationship and loss of trust. But still most of the doctors chose to react calmly and explain the disease in detail to the patient and council them so as remove the wrong perceptions formed by the hypnotising effect of internet. Surprising results were found when asked about the compliance of such patients, most of the doctors said the patients were readily compliant to their prescription and at the most were concerned about adverse effects of drugs . This shows that though the patients are adamant about their beliefs, But still value the doctor's prescription over the internet.

Our study is in accordance with other few studies related to this topic . An earlier study by Erdem et al ⁴ also showed that doctors are concerned about the physician–patient relationship when they have to explain to patients that their Internet-based information is less than accurate; consequently, the physician–patient relationship is often affected. but a similar study Kim et al ⁵ showed that doctors in Korea perceived it as neutral but also expressing it as an hindrance to efficient time management during visits. So, our study helps to highlight the issues faced by the doctors and their views on encountering such a patient and the negative effects it has on the relationship of the patient with the doctor and its effect on fundamental value of trust. This study also provides some of the recommendations on how to handle such patients. However, like any other study, our study has certain limitations major being that it does not include the views of the patients on the effect as this relationship is a two way process also since our design is that of a qualitative study, no result verification can be provided by concrete figures. This creates further scope of study with inclusion of patients, larger sample size and a quantitative design

CONCLUSION

So overall from our study it can be strongly emphasised that patient coming with pre formed internet guided diagnosis has significantly negative effects on the Doctor patient relationship as the views discussed above show that doctors have only negative perceptions on encountering such a patient and also the physician faces issues in management. In such cases the doctors trust on patient is lost and the physician also thinks patient does not trust the doctor and since trust is the fundamental value of this relationship it causes straining of such relationship. But our study also highlighted that the physicians have more impact on the patients compared to the internet and physicians can relax on the aspect of patients being compliant to their prescription.

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