Analyzing Doctor-Patient Relationship: A Cross-Sectional Study on Patient Concordance, Trust, and Safety During COVID-19

Aafnan Alam

Colonia High School

282 Demorest Ave. Avenel NJ 07001

ABSTRACT

This study is an investigation on how Coronavirus has impacted doctor-relationships and interactions in the medical field. It is based on the study, Dynamics of doctor–patient relationship: A cross-sectional study on concordance, trust, and patient enablement by Amitav Banerjee and Debmitra Sanyal. The purpose of this study is to find the study the determinants of core dimensions of trust, safety, and patient concordance in a doctor–patient relationship during COVID-19 and to explore any association, if any, between these core dimensions. This study has a cross-sectional design to it: quantitative and qualitative methods will be used. A sample of 50 patients was surveyed at a private practice as part of the quantitative study. Data was collected through Google Forms. The core dimensions of the doctor–patient relationship, trust, empathy, and patient enablement, will use specific and validated tools. Patient interviews using the phenomenological method is the qualitative aspect of the study. In the quantitative analysis most of the sociocultural factors did not show any significant association with the doctor–patient relationship. However, gender was significantly and strongly associated with trust in the physician. A qualitative study revealed what can be done to better assure doctor patients relationships. The more patients scored a 4, the more trust, patient coordinance, or feeling of safety they had. Good doctor–patient concordance (agreement) leads to better trust in the physician, which in turn leads to increased trust and the feeling of safety during the COVID-19 pandemic, irrespective of the sociocultural determinants.

Keywords: *Concordance, doctor, safety, patient, trust, COVID-19*

INTRODUCTION

Doctor-patient relationships refers to the communication patterns and the extent to which informational exchange is communicated between two parties. A variety of studies prove communication between physicians and their patients is particularly important (Traveline, et al., 2005). This type of communication incorporates both verbal and nonverbal interactions between physicians and patients. Physicians use trust, empathy, and patient enablement to build their communication skills in order to create these relationships. If information is communicated properly, many positive outcomes will benefit improved emotional health, symptoms resolution, function, and pain control (Stewart, 1995). Patients who understand their doctors are more likely to acknowledge health problems, understand their treatment options, modify their behavior accordingly, and follow their medication schedules.

The idea of analyzing doctor-patient relationships as a core element of quality health care is not something new, however understanding and assessing the factors that influence this relationship is just beginning. In a study from 2012, it was found that better doctor–patient concordance is strongly associated with trust in the physician, which in turn has a strong relationship with patient enablement or empowerment (Banerjee & Debmitra, 2012). This proves that physician-patient relationships are based on communication through trust and patient enablement. The study also showed how interaction between anxious patients and busy doctors lead to a lack of concordance and miscommunication (Banerjee & Debmitra, 2012). Exposure to media reports of medical negligence can further erode the public trust in medicine as an institution, a trust that is declining during the last decade.

A recent study done in 2020 has similar responses. The doctor–patient relationship is strained and hanging by its last thread at the present time (Kumar, et al., 2020). As in most developing countries, administration in our country is largely failing to provide adequate health-care services to the masses, mostly due to a large population and inadequate infrastructure. This has resulted in agonizing queues, long waiting lines for surgeries, lack of essential medicines, and inaccessibility of a quality health-care provider for a large segment of the population (Kumar, et al., 2020). As a result, both parties, patients and doctors need to educate themselves and understand each other's position. Skill development in language, interpersonal relationships, communication, and time and stress management should be practiced by doctors while patients have the responsibility to be aware and educated about their condition.

Both studies mentioned occurred in India, not the United States. As a result, a strict examination of the different doctor-patient relationships in America would show a diverse stream of knowledge. The major limitation of the first study is that it was done in a single hospital and there are some local factors in play which are not applicable everywhere. Not only that, but both studies also were not performed during the time of a pandemic. All doctors and patients view the medical field in a different way. The challenge is how to ensure proper communication and trust between doctors and patients. Empathy is often needed for doctors to understand their patients better (Derksen, et al., 2013). Doctors listen to the patient and search for other physical signs. However, as a result of coronavirus, it is possible for doctors to feel uncomfortable in fear of catching COVID-19 (Buchbinder, 2020). Roughly 77,000 U.S. health care workers have tested positive for COVID-19, according to the Centers for Disease Control and Prevention. More than 400 have died (CDC). These implications are putting a further strain on the fragile doctor–patient relationship, as evidenced by the increasing trend in medical litigations.

With medical advancements and societal improvements, studies on the changing doctor–patient relationship in the USA. By understanding how COVID-19 has impacted the medical field, society can change their perceptions and study how pandemics can affect the doctor–patient relationship.

The research question is, how a pandemic can disrupt a connection of trust, empathy, and patient enablement of the doctor–patient relationship and also what are trends between these three? Doctor–patient concordance is "a consensual relationship in which the patient knowingly seeks the physician's assistance and in which the physician knowingly accepts the person as a patient" (Mayo Clinic). Through this research, a better understanding of protection while education and helping others will be reviewed.

MATERIALS AND METHODS

Study site and context

The study was carried out in a private practice among patients. The office was situated in Avenel, New Jersey. Due to rapid industrialization leading to rural–urban migration, the patients were a diverse, mostly middle-class population. The timeframe to complete the data collection and entry was one month. 20 days were set aside for data collection, and 11 days for data entry. The study was conducted during August 2020. A cross-sectional study design was used. Both quantitative and qualitative methods were employed.

During the data collection period of 20 random working days, five consecutive patients were approached daily in the waiting room of the private practice. They were explained the purpose of the study and then invited to

give informed consent to participate in the study. The respondents were interviewed using the survey instruments immediately after their consultation with the doctor. Respondents were also surveyed through social media such as Reddit and GroupMe, allowing a broader range of subjects throughout the US. This research was permissible to conduct as an anonymous survey exempt under 45 CFR 46.104(d)(2).*

Quantitative methods

Three dimensions of the doctor–patient relationship were examined, that is, empathy, trust, and patient enablement. Measurement techniques for these aspects are given below.

Study instruments

Part I of the survey instrument elicited health, demographic, and sociocultural information. Sociocultural factors such as age, sex, socioeconomic status, urban–rural background, gender, religion, and education were also recorded in part 1 of the survey instrument.
Part II of the survey instrument assessed various aspects of the doctor–patient relationship, such as:

Patient-Physician concordance

The agreement between doctor and patient was assessed with the following questions:

- How comfortable are you with your doctor?
- Do you feel safe knowing COVID-19 is still out there, but precautions are being taken in the office?
- How happy are you usually after talking to your doctor?
- How well do you think the doctor understood you?
- To what extent do you and the doctor agree about the main problem or need?
- To what extent do you and the doctor agree on what to do about the problem or need?
- Do you believe healthcare workers are helping citizens during this pandemic?

The responses to each question were recorded on a Linear Scale ranging from 0 (none) to 4 (completely) on Google Forms. Results for all the eight questions were then summed to give a cumulative score between 0 and 8, with higher scores indicating greater concordance. In the present study those scoring 7 and 8 were taken as having complete agreement or concordance and the rest as partial concordance.

Trust in physician

Trust in the doctor was measured by the Trust in Physician Scale, which yielded a score ranging from lowest to highest on the Linear Scale, with the higher scores indicating more trust. In the present study, the highest two possible values were taken as complete trust in the physician and the rest of the scores were categorized as partial trust.

Data entry and statistical analysis

Data entry and statistical analysis were carried out on Google Forms

Qualitative methods

The patients were also asked the question, " What are some possible measures that can be taken to improve doctor-patient relationships?"

RESULTS

Response rate

Out of the 51 subjects approached, 50 agreed to participate in the study, giving a response rate of 99%.

Demographic profile

A total of 50 patients were surveyed. The mean age of the respondents was 31.9 years. Out of the 50 participants in the study, 30 (60%) were females, and 20 (40%) were males. 1 (2%) did not have an education, 21 (42%) had completed high school graduation, and 22 (44%) were college graduates. 6 (12%) went to grad school. The majority of 50 (84%) subjects belonged to the socioeconomic status of the middle class; 21 (42%) were Muslims, 5 (10%) were Bhuddists, and the rest belonged to other religions.

Physician patient concordance

Out of the total respondents, 33 (66%) had complete concordance or agreement with their physician. The remaining 34% had varying degrees of disagreement with their doctors regarding their medical and health problems. 33 (66%) had complete concordance or agreement on what to do about their problem. The remaining 34% had varying degrees of disagreement on what to do with their doctors.

Table 1- Association of the sociocultural determinants with doctor–patient concordance

Determinants	Full concordance (%)	Partial concordance (%)	Total (%)
Gender: ~ Female ~ Male	 20 (66.67) 14 (70)	 10 (33.33) 6 (30)	 30 (100) 20 (100)
Socioeconomic Status High Middle Low	 2 (100) 28 (66.67) 3 (50)	 0 (0) 14 (33.33) 3 (50)	 2 (100) 42 (100) 6 (100)
Religion Buddhism Islam Others	 6 (100) 16 (76.1) 11 (52.3)	 0 (0) 5 (23.8) 12 (57.1)	 6 (100) 21 (100) 23 (100)
Education High School College and up	 16 (72.7) 14 (63.6)	 6 (27.2) 8 (36.3)	 22 (100) 22 (100)
Age 18-25 26-33 34-41 42-49 50-57	 16 (64) 3 (50) 0 (0) 2 (50) 7 (100)	 9 (36) 3 (50) 2 (100) 2 (50) 0 (0)	 25 (100) 6 (100) 2 (100) 4 (100) 7 (100)

Trust in physician

This was less than the physician–patient agreement. Out of the total of 50 respondents, 24 (48%) had complete trust in their physicians; the rest (52%) had varying degrees of reservations regarding complete trust in their treating doctors.

Table 2- Association of some sociocultural determinants with trust in physician

Determinants	Full trust (%)	Partial trust (%)	Total (%)
Gender: ~ Female ~ Male	 25 (83.33) 14 (70)	 5 (16.67) 6 (30)	 30 (100) 20 (100)
Socioeconomic Status High Middle Low	 2 (100) 30 (71.43) 3 (50)	 0 (0) 12 (28.57) 3 (50)	 2 (100) 42 (100) 6 (100)
Religion Buddhism Islam Others	 6 (100) 17 (80.95) 12 (0)	 0 (0) 4 (19.05) 23 (100)	 6 (100) 21 (100) 23 (100)

Education High School College and up	 18 (80.95) 17 (60.71)	 4 (19.04) 11 (39.29)	 22 (100) 28 (100)
Age 18-25 26-33 34-41 42-49 50-57	 15 (65.21) 3 (50) 0 (0) 1 (50) 7 (100)	 8 (34.78) 3 (50) 2 (100) 1 (50) 0 (0)	 23 (100) 6 (100) 2 (100) 2 (100) 7 (100)

Association of the sociocultural factors with physician–patient concordance

This is shown in **Table 1**. Females tended to have a better concordance with their doctors (88.64%) compared to males (70%). Higher socioeconomic status was related to better concordance. People with high school education also showed better agreement with their doctors. Those who were younger, typically from 18-25 years of age, had more concordance than those older, as well as the elderly from 50-57 years of age.

Sociocultural factors and trust in physician

This is shown in **Table 2.** It will be seen that females had more trust in their physicians compared to males. Patients from the high and middle socioeconomic status had higher trust (100% and 71.43% respectively) compared to patients from the lower socioeconomic status (50%). Those who were generally young or elderly had higher trust in their doctors.

Association of Safety during COVID-19 among patients

This is shown in Table 3. It is seen that males feel more safe with their physicians (85%) compared to females. Patients from the middle socioeconomic status felt more safer (69.52%) than patients from the higher and lower socioeconomic status. Those who were generally older or elderly felt more safe with their doctors than people from 18-25 (69.57%). Generally, many (40%) believe healthcare workers are helping people during the pandemic.

Table 3- Association of Safety during COVID-19 among patients

Determinants	Fully Safe (%)	Partially Safe (%)	Total (%)
Gender: ~ Female ~ Male	 12 (40) 17 (85)	 18 (60) 3 (15)	 30 (100) 20 (100)
Socioeconomic Status High Middle Low	 1 (50) 25 (69.52) 4 (66.67)	 1 (50) 17 (40.48) 2 (33.33)	 2 (100) 42 (100) 6 (100)
Religion Buddhism Islam Others	 6 (100) 17 (77.2) 17 (77.2)	 0 (0) 4 (18.1) 6 (27.2)	 6 (100) 21 (100) 23(100)
Education High School College and up	 17 (77.2) 20 (90.9)	 5 (22.7) 2 (9.09)	 22 (100) 22 (100)
Age 18-25 26-33	 7 (30.43) 3 (50)	 16 (69.57) 3 (50)	 23 (100) 6 (100)

34-41 42-49 50-57	2 (100) 2 (100) 7 (100)	0 (0) 0 (0) 0 (0)	2 (100) 2 (100) 7 (100)
40 (80%) of all respondents fully agreed that healthcare workers are helping citizens during this pandemic, while only 10% partially agreed			

Results of the qualitative study

Participant observation

When asked the question, " What are some possible measures that can be taken to improve doctor-patient relationships?":

- Many responses were respectively:
  - Better communication
  - Transparency and honesty
  - Understand the patient's perspective
  - More time/shorter waiting times
  - More sanitary

DISCUSSION

Both patients and doctors differ in their beliefs, attitudes, and hopes. The art of medicine depends on the ability to acknowledge and respect these differences and treat every patient as an individual. The challenge for the doctor is to provide the patient with correct and sometimes complex information, and discuss management options with him/ her or the caretaker; at the end of which appropriate and ethical decisions are undertaken, which are within the available resources. In this study, although physician–patient concordance and trust were both relatively high, feeling safe was the weakest link. Females had better concordance and trust, while males felt more safe. Patients from a higher socioeconomic status and middle class showed better concordance and trust.

The lack of trust in the physician, has implications for the management of many illnesses, which require long-term treatment. An important example is the Coronavirus (COVID-19). Efforts should be made to ensure better trust in doctor–patient encounters and safety by maintaining sanitation. Although we should be cautious in assuming that concordance and trust means better compliance, there is empirical evidence that patients reporting a higher level of trust in physicians are more likely to report continuity of care and compliance with medications (Kerse et al.).

An important finding in the present study, which has an implication for practical application, is that better doctor–patient concordance have a strong and highly significant association with trust and the feeling of safety in the patients, which in turn has a strong and highly significant relationship with patient enablement or empowerment. The key to patient empowerment is through better doctor–patient concordance or agreement.

Some of the challenges in improving this concordance, and in turn the trust between doctor and patient, have been brought out in the qualitative inputs from focus group discussions among respondents. In short, better understanding, time management, and transparency should be displayed among interactions between doctors and their patients.

The current medical care environment is complex, including the rise of consumerism, increasing litigations, high-pressure marketing, easy access to medical information via the internet, and poor access to reliable healthcare causing overcrowding in many medical centers. The interaction between anxious patients and busy doctors can lead to a lack of concordance and other communication gaps. Furthermore, with COVID-19, many patients feel unsafe and would rather stay inside protected.

To conclude, the doctor–patient relationship continues to be more in the realm of art rather than science. Numbers cannot capture every nuance of this complex relationship. Despite this study, most descriptions of the core dimensions of the doctor–patient relationship come primarily from conceptual analysis and not from empirical research. However, through this cross-section study, trends and better correlations can be found to give citizens a better understanding of the healthcare industry, especially during tough times such as the COVID-19 pandemic.

Work Cited

Banerjee, Amitav, and Debmitra Sanyal. “Dynamics of doctor-patient relationship: A cross-sectional study on concordance, trust, and patient enablement.” Journal of family & community medicine vol. 19,1 (2012): 12-9. doi:10.4103/2230-8229.94006

Buchbinder Liza. “How doctors’ fears of getting COVID-19 can mean losing the healing power of touch: One physician’s story.” The Conversation. Published online 2020 June 16. https://theconversation.com/how-doctors-fears-of-getting-covid-19-can-mean-losing-the-healing-power-of-touch-one-physicians-story-137379

Centers for Disease Control and Prevention. Published on 2020 July 15. https://www.cdc.gov/coronavirus/2019-ncov/cases-updates/cases-in-us.html

Derksen, Frans et al. “Effectiveness of empathy in general practice: a systematic review.” The British journal of general practice : the journal of the Royal College of General Practitioners vol. 63,606 (2013): e76-84. doi:10.3399/bjgp13X660814

Kerse, Ngaire et al. “Physician-patient relationship and medication compliance: a primary care investigation.” Annals of family medicine vol. 2,5 (2004): 455-61. doi:10.1370/afm.139

Kumar, Barun et al. “Perception of Doctor-Patient Relationship in the Present Time from the Viewpoint of Doctors: A Qualitative Study at a Tertiary Health-Care Center in Eastern India.” Indian journal of community medicine : official publication of Indian Association of Preventive & Social Medicine vol. 45,1 (2020): 100-103. doi:10.4103/ijcm.IJCM_106_19

Mayo Clinic. Jacksonville, 2006 US Dist. LEXIS 33668, at *10 (ND Ill May 15, 2006)

Stewart, M. A. (1995, May 01). Effective physician patient communication and health outcomes: A review. Retrieved from https://www.ncbi.nlm.nih.gov/pubmed/7728691

Travaline, John, Ruchinskas R, D'Alonzo GE Jr. Patient-physician communication: why and how. J Am Osteopath Assoc. 2005;105(1):13-18.