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Doctor-Patient communication among Interns at a tertiary care medical college and hospital in eastern India

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Abstract: *Background:* There is supreme importance for teaching-learning among Interns regarding their perception on Doctor-Patient relationship based on Doctor-Patient communication. *Objectives:* To find out the perception of Interns regarding Doctor-Patient Communication. *Methods:* A hospital-based prospective open-label observational cross-sectional study was conducted among interns to assess the perception and correlates based on distinguished questions on Doctor-Patient Communication at the emergency, out-patient and in-patient departments, at a medical college and hospital in eastern India during March to May 2021. *Results:* The perception of the Interns regarding the reported expectation of patients was positive, while Interns' self-satisfaction after independently managing the patients could assess the strength of mutual communication. On the Interns' perception regarding expectation of patients, all the responses were in favour of them except 'time constraints' and 'general advice'; all were statistically highly significant. On the Interns' reported satisfaction after independently dealing with the patients, majority of responses favoured Intern's positive approaches of calm hearing, addressing complaints and caring patient's view; yet, private matters and other issues of the patients were not satisfactorily addressed; these responses were highly significant. On critical analysis, the Interns were satisfied while communicating with the patients amid increased stress, workload and patient load; Interns were content on patients' compliance which was statistically significant. *Conclusions:* This study revealed the most updated observation on interns' perception regarding Doctor-Patient communication on a positive note and their satisfaction.

Keywords: Doctor-Patient relationship, Doctor-Patient communication, Interns.

Introduction

Intern trainees are the backbone of the medical college setup, where they act as the first contact to attend patients and their caregivers. As such, there is paramount importance for teaching-learning among Interns regarding the doctor-patient relationship based on doctor-patient communication. This will help them grow as responsible physicians and serve the population who need their care at the grassroots level till the last man on the road.

The patient is an individual, fearful and optimistic, and he or she is looking for relief, assistance, and reassurance. The continuing medical education updates physicians' understanding of complex disease processes to provide new approaches for optimum interventions. Yet, skill with the most sophisticated applications of laboratory technology and the use of the latest therapeutic modalities alone does not make a good physician. It has been observed that the cultivation of a closer inter-personal relationship between physicians and patients only is the heart of successful patient care [1].

This becomes more relevant during the present COVID 19 pandemic situation, wherein any attrition or breech in this pious relationship may cause irreversible damage and bearing misery on the patients. In view of this, it is gathered that in addition to their theoretical and practical knowledge, the Interns and PG trainees must have their best overall presentation including attire, attitude and communication skill, which surely will be helpful in developing patients' trust upon

doctors and reflects the discipline and decorum of the institute as well. In the present study, this research group attempted to estimate the perception regarding the basics of Doctor-Patient Communication among interns at MGM Medical College & LSK Hospital, Kishanganj, Bihar.

Material and Methods

Study Design: Hospital-based prospective open-label observational study.

Place of Study: The emergency, out-patient and in-patient departments of Mata Gujri Memorial Medical College and Lions Seva Kendra Hospital, Kishanganj, Bihar.

Duration of Study: The study was conducted during the period from March to May 2021.

Study Population: Interns working in the emergency, out-patients and in-patients departments after obtaining their consent (Informed Consent Process).

Sample Size: All Interns based on inclusion & exclusion criteria.

Inclusion Criteria: Interns working in the emergency, out-patient and in-patient departments who are willing to execute informed consent.

Exclusion Criteria: Interns who are unwilling to execute the informed consent process; Interns who have not agreed to participate and follow-up and interns who were seriously ill.

Primary Outcome Variables: Interns' perception on Doctor-Patient Communication.

Study Tool: The study tool was a predesigned, pre-tested, semi-structured questionnaire (data collection tool). This tool was used to collect data from the study participants by Interview Technique to elicit the socio-demographic information on personal characteristics like age, gender, ethnicity, socioeconomic background, details of postings, precise experiences including objective and subjective findings. Initially, the questionnaire was pre-tested on ten (10) interns selected out of the same group of interns and their feedback was not included in this study. Necessary modifications were done in the questionnaire after repeated piloting before initiation of the data collection.

Data Collection Procedure: Institute Ethics Committee (IEC) of MGM Medical College approved the study and necessary consents of competent hospital authorities were obtained. Following Helsinki Declaration in letter and spirit, the respondents were given options to participate or not. The informed consent process was followed sincerely with an explanation of participatory contribution. Before the study was initiated, each participant was individually counseled prior to the study that no potential risk is involved and they will have full autonomy to leave the study at any point of time. Each participant was ensured that the data would only be used for research purposes and would not hamper their work, irrespective of their participation in the study. In addition, written informed consent was obtained from each participant. Ethical principles were adhered to with strict confidentiality while gathering information.

All were assured that their non-participation, refusal or withdrawal at any stage will not influence their scholastic upbringing and ensured about the sanctity and strict confidentiality of data. Thus, after proper counseling, consent was obtained from the individual participant prior to the study and data was collected from 1st April to 15th May 2021. All the collected data were kept confidential with the investigators and will not be disclosed for any type of assessment, management or intervention. Data collection procedure was undertaken by the principal investigator and co-principal investigators, strictly following Government of India COVID-19 guidelines with necessary follow-up. The principal investigator and co-principal investigators will conduct necessary follow-up. All the data were reported and missing data were rectified accordingly.

Statistical Analysis: MS-excel spreadsheets were prepared based on data collected from the Interns. The data were managed and analyzed with Microsoft excel sheet, epi info 2018 v 7.2 and SPSS 16 evaluation version after cross-checking with the original documents to ensure consistency, reliability,

and accuracy. For statistical significance, we have applied chi-square test to find out independence between the various factors and proportional 'z' test, at 95% confidence interval, in relation to relevant factors for dissatisfaction and poor compliance of interns.

Results

The entire qualitative assessment of Doctor-Patient communication was broadly classified as:

Parameter 1: Interns' perception regarding expectation of patients and Interns' satisfaction after independently dealing with the patient

Parameter 2: To assess the strength of mutual communication, it has been distinguished based on the list of questions to the following perspective –

Interns' perception regarding expectation of patients:

1. The patient told me the true reason for his/her visit.
2. The patient talked about his worries.
3. The patient received sufficient time.
4. The patient received concise information about the treatment e.g. General advice, medication, diet, referrals.
5. There was even more the patient wanted to discuss but didn't get the chance.
6. The patient expressed his/her expectations of visit.
7. The patient was largely satisfied with the visit.
8. The patients' expectations of visit was largely fulfilled.
9. The patient felt his/her problems were taken seriously

Interns' satisfaction after independently dealing with the patients:

1. I listened intensely to the patient.
2. We talked about the patients' views of the reasons for complaints.
3. We agreed on the reasons for the patients' complaints.
4. We also talked about other things like the patients' work and private matters

The study was conducted among census population of interns posted rotationally in the emergency, out-patient and in-patient departments about doctor-patient communication. The following tables (Table 1 & 2) exhibit the frequency distribution of their mutual communication.

Interns' perception regarding expectation of patients: In this part, there were nine questions on the Interns' perception regarding reported expectation of patients from them. Of these questions, all the responses were in favour of Interns except time constraints reported by the patients and in the question "The patient received concise information about the treatment e.g., General advice" all were in favour of Interns; these responses were found to be statistically highly significant ($p<0.00001$) [Table-1, Figure-1].

Fig-1: Interns' perception regarding expectation of patients

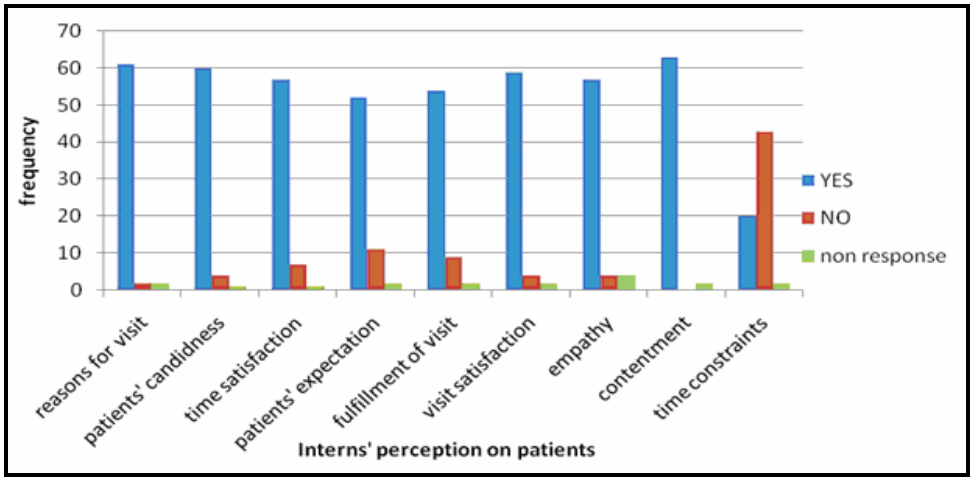


Table-1: Interns' perception regarding expectation of patients				
	Yes	No	Non Response	P value
The patient told true reasons for visit (reasons for visit)	61	2	2	χ^2 = 175.0622 With 16 degrees of freedom , p< 0.00001
The patient talked about his stories (patients' candidness)	60	4	1	
The patient received sufficient time (time satisfaction)	57	7	1	
The patient expressed his/her expectations of visit (patients' expectation)	52	11	2	
The patients' expectations of visit was largely fulfilled (fulfillment of visit)	54	9	2	
The patients was largely satisfied with the visit (visit satisfaction)	59	4	2	
The patient felt his/her problems were taken seriously (empathy)	57	4	4	
The patient received concise information about the treatment eg General advice (contentment)	63	0	2	
There was even more the patient wanted to discuss but didn't get the chance (time constraints)	20	43	2	

Interns' satisfaction after independently dealing with the patients: In this part, there were four questions related to Interns' reported satisfaction after independently dealing with the patients. On the issue of their satisfaction after independently dealing with the patients, a great majority replied favorably on their positive aspects of calm hearing, addressing complaints and caring patient's views. On the other hand, they could not satisfactorily address other issues of the patients in their busy activity on the patients' work and private matters; these responses were also found to be statistically highly significant (p<0.00001) [Table 2, Figure 2].

Table-2: Interns' satisfaction after independently dealing with the patients				
	Yes	No	Non Response	P value
I listened intensely to patient (calm hearing)	63	2	0	χ^2 =175.0622 With 6 degrees of freedom , p< 0.00001
We talked about patient's view of the reason of complaints (caring patients' view)	54	10	1	
We agreed on the reason for the patients' complaints (addressing complaints)	56	8	1	
We also talked about other things like the patients' work and private matters (focused conversation)	34	29	2	

Fig-2: Interns' satisfaction after independently dealing with the patients

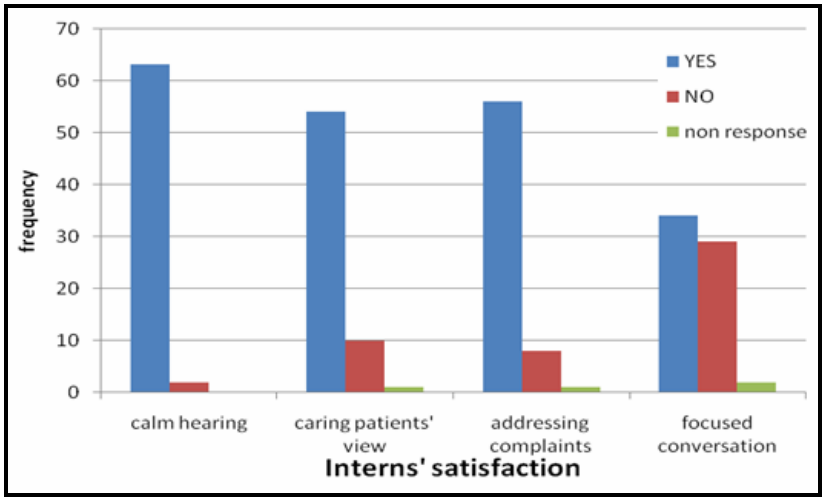
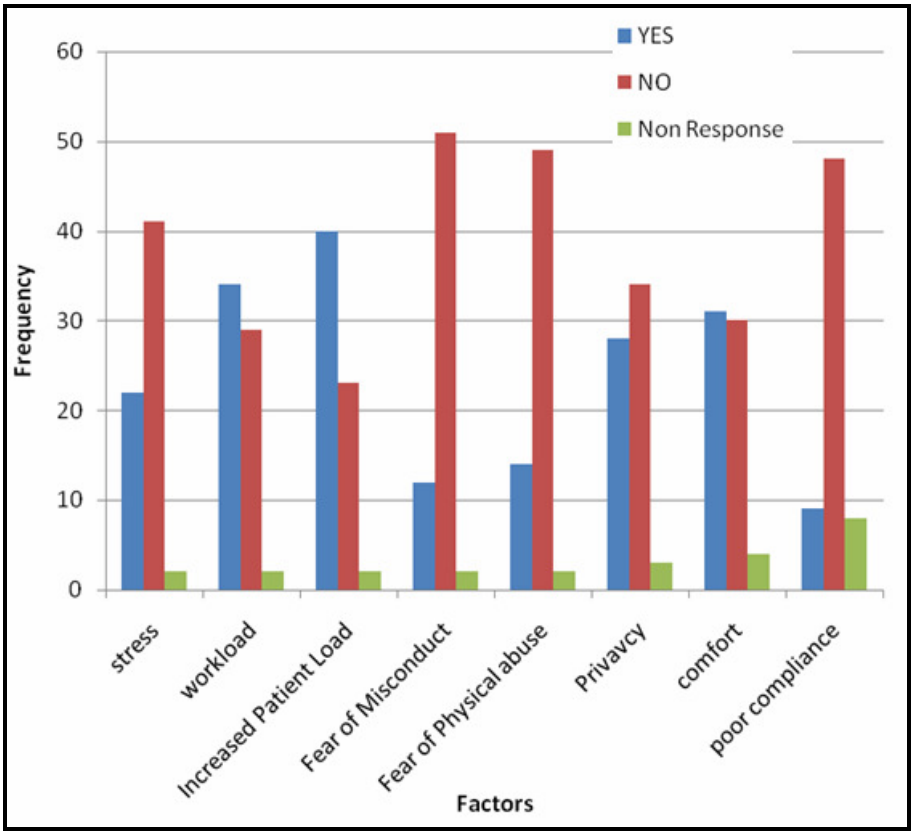


Table-3: Reasons for dissatisfaction regarding appropriate communication with patients				
Factors	**Yes**	**No**	**Non Response**	**P Value**
Stress	22	41	2	$\chi^2 = 68.089$ With 14 degrees of freedom , p< 0.00001
Workload	34	29	2	
Increased Patient Load	40	23	2	
Fear of Misconduct	12	51	2	
Fear of Physical abuse	14	49	2	
Privacy	28	34	3	
Comfort	31	30	4	
poor compliance	9	48	8	

Fig-3: Factors related to Dissatisfaction and Poor compliance



Our study unveils the statistical significance (p<0.00001) of the dissatisfaction level of the study population (Interns) regarding appropriate communication with patients [Table 3, Figure 3].

The researchers attempted to pursue more critical analysis regarding the factors on the Dissatisfaction and Poor compliance. Our study applied proportional z test with 95% confidence interval. Our study population of Interns were not feeling extremely dissatisfied while communicating with the patients though there was increased stress (p= 0.0061), workload (p< 0.0001) and patient load (p<0.0001). Yet, Interns noted contents of patients in terms of compliance which was statistically significant (p<0.0001) [Table 4, Figure 3].

Table-4: Factors related to Dissatisfaction and Poor compliance								
Reasons for	**Factors**	**Yes**	**No**	**Non response**	**z value**	**p value**	**significance level**	**95% CI**
Dissatisfaction regarding appropriate communication	Stress	22	41	2	2.606	0.0061	significant	0.2157-0.4443
	Workload	34	29	2	0.4	<0.0001	Highly significant	0.3427-0.5373
	Increased patient load	40	23	2	1.9	<0.0001	Highly significant	0.2565-0.4435
	Fear of misconduct	12	51	2	5.1	0.10565	not significant	0.2365-0.4525
	Fear of physical abuse	14	49	2	4.6	0.5155	not significant	0.1154 - 0.3152
Lack of proper infrastructure for patient consultation	Privacy	28	34	3	1.1	0.000	significant	0.4221-0.6179
	Comfort	31	30	4	0.4	0.000	significant	0.3623-0.5577
	poor compliance	9	48	8	4.6	<0.0001	Highly significant	0.643-0.817

Discussion

This study was internalized with the idea that Interns are the future health care provider, as such, they need to be sensitized regarding the paramount importance of the Doctor-Patient relationship and discharging their critical thinking with the finest communication. As per National Medical Commission in continuation with the directions from the Medical Council of India, the Internship period has been maintained for 12 months after the 3rd Professional summative assessment. During this period of hands-on training, the budding healthcare professionals get an opportunity to interact with the health care seekers under the able guidance of senior professional experts.

As future physicians, it is indeed a privilege, duty or obligation for an intern to become a full-fledged physician, who is supposed to show tact, sympathy and empathy, as the patient is more than a list of signs, symptoms, disrupted functions, impaired organs, and agitated emotions. The patient-physician partnership has traditionally been organized around the idea of the 'clinical model,' which is utilitarian and teleological in its view of the reciprocal connection. The patient is diagnosed with a disease caused by an external factor or a malfunctioning system that causes pain and dissatisfaction. If this condition is diagnosed and treated successfully, the patient's health can be restored. Most of the conventional medical practice is echoed in this clinical model. The 'relational model' on the other hand, focuses on the consistency of the patient-physician interaction process. Instead of the physician's position as an expert offering professional advice and knowledge to a patient who embraces it passively, the partnership now becomes a participatory one, in which both players share information.

The patient is transformed from a bystander to a vital participant in the healing process. Communication that leads to mutual confidence is critical to the success of any joint partnership, particularly one involving a credence form of service. Credence products are goods and services exchanged in interactions with high levels of knowledge asymmetry, in which the buyer's needs are controlled by the supplier. Many professional services resemble credence products because they are often personalized, necessitating extensive interaction with both parties to generate value. The physicians value benevolence (affective ties) less than confidence and reciprocity, with sub-

components of social contact and friendship being the least significant aspects of the relationship. Rather, physicians assess the relationship based on the doctor's ability to solve the patient's problems through dedication, serviceability, reliability, and trustworthiness [2].

Researchers defined humaneness and technical consistency as the most important factors affecting satisfaction in a meta-analysis of 221 studies of patients' satisfaction with medical care. Patient confidence was found to be highly associated with comforting and caring, professional competency, and communication style with gentleness, looking in the eye, discussing choices, and care as an equal, in a study of family practice physicians [3].

In recent years, there has been an increase in disputes between healthcare providers and healthcare seekers, putting the therapeutic relationship (TR) in jeopardy. In a study in China, two reviewers independently searched the literature, selected studies and collected data by combing through three international electronic databases and three Chinese electronic databases to find all related observational studies on influencing factors for TR published in English and Chinese between January 2000 and January 2020.

There were 11 studies that met the selection criteria among the 3290 records that were initially listed. In total, 96,906 people were included in the study. According to the findings, 55.73 percent of healthcare staff and 33.7 percent of patients believe the TR is tense. According to the meta-analysis, healthcare workers who were male, older, less trained, employed in a non-surgical department, and holding a senior position were more negative about the TR. Patients who were poorly qualified, lived in rural areas and did not have health insurance were more pessimistic about the TR. A narrative approach was used to examine and explain the 25 other associated factors to the TR. The results may be worth considering in the development of relative policies to foster doctor-patient harmony. [4]

What was learnt about the expectation of patients?: The researchers working on medical education felt that to become an ideal doctor, an undergraduate intern needs to inculcate personal traits like competency in knowledge including technical capabilities as well as interpersonal connections; also needs to have good intents to help one and all with an empathetic approach [5]. The life of the Interns is not a bed of roses, as they may have to face the wrath of many people on a regular basis which they do not deserve amidst workload upto 16 hours per day. They are still expected to attend the library for reading books, journals, and other academic works. It is surprising that even with such a lot of stress, the interns still have to keep their cool to deliver the best. Though in the process they will also have to accept several rebukes from the bosses and many a time, it results in frustration projected onto patients and their kith-n-kin resulting in deteriorating the cordial relationship between them [6].

As per Greenhalgh and Wessely, patients are independent persons with rationale thinking as they always make efforts to fulfill their own interests regarding economic decisions about their health and medical needs. With this, the traditional patient-physician relationship has skewed and patients no longer treat their doctors as all-powerful persons who cannot be questioned [7].

In a survey done on 38 participating clinicians in general medicine walk-in clinic in USA, 500 adults presenting with a physical symptom, correlates of patient satisfaction at varying points in time were assessed using a survey with two weeks and three-month follow-up. Patient symptoms, symptom-related expectations, functional status, mental disorders (PRIME-MD), symptom relief, unfulfilled expectations, satisfaction (RAND 9-item survey), visit costs, and health utilisation were all taken into consideration. 260 patients (52%) were completely satisfied with their care immediately after the visit, rising to 59 percent after two weeks and 63 percent after three months. Patients over the age of 65, as well as those with greater functional status, were more satisfied and three-month. Receiving an explanation of the likely reason, as well as the projected duration of the presenting condition, were other independent variables that predicted immediate after-visit pleasure. Experiencing

symptomatic improvement improved satisfaction at two weeks and three months, however more visits (real or expected) for the same problem decreased satisfaction. At all times, the expectations are strong predictors of dissatisfaction. Patient satisfaction surveys must take into account the sample period as well as relevant patient characteristics [8].

Predictors of Patient Satisfaction: In a study done on 304 participants wherein they were approached before their scheduled visit to the clinic, majority of the patients agreed that seven out of 28 elements of care were necessary, whereas the nonwhite patients (not completed college) expected more number of elements of care. 38% of respondents complained that they were not given necessary elements of care; further, 63 to 100% complained of not receiving care as per agreement between patients and physicians, which led to lower visit satisfaction. Hence, to maintain better physician-patient relationship, expectations of patients must be well understood before dealing with them [9].

Perception of interns after independently dealing with the patients: It is not out of place to mention that, with an age of consumerism in the 21st century, people have become very conscious about their own interest to get the best services for them for the fees they pay [6]. A qualitative study including interviews and focus group discussions (FGDs) conducted at a tertiary healthcare centre in West Bengal, wherein 33 residents participated; it was observed that overburdened doctors with a heavy workload, unrealistic treatment style, intolerant patients, and gaps in infrastructure and logistics facility were the cause for the strained Doctor–patient relationship. It has further been observed by the researchers that, as this situation has arisen equally due to doctors, authorities and patients' near and dear ones, much exaggerated by media hype, it is their combined responsibility to change the gloomy scenario [10].

A formative research study with participation of 30 out of 50 interns in a tertiary care medical teaching institution observed that, for effective medical leadership skills, communication skills like impartiality, patience, integrity, self-discipline, amicable to others opinions, updated knowledge, self-confidence, are the prerequisite [11].

Strengths of the study: Exploring the perceptions regarding doctor-patient communication is novel work in this part of India. Yet, few studies have been reported in literature from low and middle-income countries. Investigators have assessed their findings with special precautions during data collection on a very sensitive issue.

Limitations of the study: We had several limitations. Firstly, this was a single centre study on the perceptions regarding doctor-patient communication. Secondly, our sample size was less as it was a self-funded study with compromised logistics. Thirdly, our study was conducted in a non-government medical college, which may have limited external validity. Fourth, the patient's opinion on doctor-patient communication was not taken.

Future directions of the study: In the futuristic vision, we hope to conduct a multicentric study and this data will be compared with those of the previously published literature on comparable researches to find similarities as well as disparity between present and past works. Unique observations, if any found in the present work, would be attempted to be explained, whenever possible. Strengths, limitations and future directions of the study will be mentioned. Conclusions will be drawn carefully, avoiding biases and considering reliability and validity.

Conclusions

This study categorically revealed the most updated picture of the study on the perceptions regarding doctor-patient communication with attempts to collate the information in this part of eastern India. This information will contribute to the development of preventive and control strategies for capacity building among interns by the stakeholders working on a national platform on the welfare of future physicians.

Recommendations: Although a large amount of data are available on the perceptions regarding doctor-patient communication from

various parts of the world, there are limited data from India. This research explored the magnitude of the perceptions regarding the doctor-patient communication among interns and added to the existing data that are essential to the planning, implementation and evaluation of services for the upgradation of healthcare teaching-learning. The researchers concluded that leadership training must be included in the graduation programme.

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