

## **Original Research Article**

# PEDIATRICIAN PERCEPTION OF CHANGE IN PATIENT DOCTOR RELATIONSHIP AND ITS IMPACT ON CLINICAL PRACTICE

 Received
 : 01/07/2024

 Received in revised form
 : 20/08/2024

 Accepted
 : 05/09/2024

Kevwords:

Human beings, doctors, psychological disorder, public or private setup.

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DOI: 10.47009/jamp.2024.6.5.13

Source of Support: Nil, Conflict of Interest: None declared

Int J Acad Med Pharm 2024; 6 (5); 61-66

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#### Abstract

**Background:** Human beings are the noblest creation of God on the surface of the earth but lifespan of the humans are predetermined during which pain and pleasure are part and parcel of life. 1 It has been said that God has chosen special persons to take care of the physical pains and sufferings of man and such persons are known as doctors. But recently countrywide dissatisfaction is seen on the major pillar of the medical services where a lot number of questions are raised. Changing scenario of doctor- patient's relationship from India's prospective is affecting the clinical practice to an extent medical field is in shock. Materials and Methods: This study was done at Artemis Hospital, Gurugram in the department of Paediatrics over a period of 12 months, from June 2017- May 2018. An approval from the ethical and scientific committee of the hospital was obtained. Doctors who have completed post graduate in paediatrics. Practicing paediatrics in India were included in the study. Doctors who are not willing to fill the form, Paediatricians with any mental or psychological disorder were excluded from the study. **Result:** The average age of the doctors was around 40 years of age. The mean years of experience is around 12 years with majority of doctors with less than or equal to ten years. In my comparison I have used those less than 10 years and more than or equal to 10 years. 181 doctors have experience less than 10 years. 71.99% of male doctors has faced violence while 62.89 % of female doctors has been a victim of violence. Based on scores there is significant difference in violence faced by male and female doctors as a whole. Conclusion: The study has shown that deteriorating doctor patient relationship with violence against doctors, medico-legal concerns has increased defensive practices, attitude changes and many doctors have changed from inpatient to OPD only and vice versa. Experience has enabled the doctors to allay defensive practices or defensive practices are more in recent days making the less experienced doctors to be more defensive. Gender, mode of practice, hospital or non-hospital based practice, public or private setup all were affected by the changes and there is no significant difference found in my study.

## **INTRODUCTION**

Human beings are the noblest creation of God on the surface of the earth but lifespan of the humans is predetermined during which pain and pleasure are part and parcel of life. [1] It has been said that God has chosen special persons to take care of the physical pains and sufferings of man and such persons are known as doctors. But recently countrywide dissatisfaction is seen on the major pillar of the medical services where a lot number of questions are raised. Changing scenario of doctor- patient's relationship from India's prospective is affecting the

clinical practice to an extent medical field is in shock<sub>[1]</sub>

Emanuel and Dubler earlier have suggested that the ideal doctor-patient relationship should consists of the six C's: Choice, competence, communication, compassion, continuity, and (no) conflict of interest. [2]

In the traditional doctor-patient relationship, the doctor has been like the "information broker" to the patient. The patient usually has had little access to quality medical information that is required. Information transfer has most often been limited to what the doctor will explain during the office visit, written hand-outs, nurse's explanation, or what the patient could find in the public library, material

which has often been limited, dated, or at an inappropriate level. In recent years, many sources of patient information have been increasingly developed.<sup>[3]</sup>

A robust science of the doctor–patient encounter and relationship can/could guide a good and proper decision making in health care plans.<sup>[4,5]</sup>

Attending to those who suffer a physician requires not only the scientific knowledge and technical abilities, but also a very good understanding of the human nature. The patient is not only a group of symptoms with damaged organs and altered emotions but he/she is a human being at the same time, who is worried and hopeful and searching for relief, help and trust. The importance of a good and secure relationship between patient and physician can never be taken lightly because in most cases an accurate diagnosis, as well as an effective treatment, relies directly on the true quality of this relationship. [6]

The main objectives of the study are to analyse pediatrician perception of change in patient doctor relationship, its impact on clinical and financial aspect of practice.

#### MATERIALS AND METHODS

This study was done at Artemis Hospital, Gurugram in the department of Paediatrics over a period of 12 months, from June 2017- May 2018. An approval from the ethical and scientific committee of the hospital was obtained.

**Study Population:** Doctors working in the department of pediatrics in hospital and nursery settings in India.

**Study Design:** cross sectional survey and exploratory study

Sample Size: 370

The current study will take into account a twofold approach having both Qualitative and Quantitative analysis.

For the quantitative analysis study design based on a simple random sample, the sample size required can be calculated according to the following formula.

Formula:

$$\mathbf{n} = \frac{\mathbf{z}^2 \times \mathbf{p}(\mathbf{1} - \mathbf{p})}{\mathbf{m}^2}$$

## **Description:**

n = required sample size

z = confidence level at 95% (standard value of 1.96)

p = estimated proportion (response rate)

m = margin of error at 5 % (standard value of 0.05) Calculation: Based on studies done for Doctors response in various studies ranges from (53-78%)(44–46) So for our study we have 60 % estimated response, at 95 % confidence level the standard value of z is 1.96 and we have 5 % margin of error. After putting these values in above formula we get sample size for the study. So far our required sample size will be as follows by using the above formula of sample size: Z=0.95, p=0.6, m=0.05

N=0.95\*0.95\*[0.6(1-0.6)]/(0.05\*0.05) $n \sim 368.79$ 

Therefore our required sample size for the prospective observational study design will be 370. For the Qualitative study 10 subjects from the abovementioned samples would be taken to study the detailed narrative analysis.

It is a cross sectional study whereby data was collected using a questionnaire forms filled by practising paediatricians across India who satisfy the inclusion criteria and exclusion criteria were selected.

#### **Inclusion Criteria**

- Doctors who have completed post graduate in paediatrics.
- Practicing paediatrics in India.

### **Exclusion criteria**

- Doctors who are not willing to fill the form.
- Paediatricians with any mental or psychological disorder.

#### Questionnaire preparation

The questionnaire is formed which could depict ongoing conflicts in doctor-patient relationship based on previous studies that have evaluated those conflicts separately. Few questions have been added to complete the aims and objectives as directed my respective guide and co-guides. To complete the objective of comparison a scoring formula has been applied i.elikert scale of 0, 1, 2. Here 0- no or never and 1 and 2 grade their experience. This scoring is used to derive statistical difference in the end. The questions prepared for interview are a few questions selected by my co-guide from the questionnaire prepared for quantitative method. This questionnaire was distributed to all the doctors in hand and filled by them and collected. They have been given and collected during pan India conferences of NEOCON and PEDICON in our country. The doctors in Delhi NCR have been visited and collected from them in their respective hospital and clinic.

This study has a quantitative and qualitative study. Quantitative: consists of obtaining data from the form filled and take the data and analyse and compare. Qualitative: is using interviews of around 10 Paediatrician who are practicing in and around Delhi NCR.

#### **Statistical Method**

Quantitative: The score given by each doctor is taken as a value and the mean and SD calculated then t score is obtained for each group by using T score for 2 independent means. The two groups are compared over two tier end and p score is calculated.

Qualitative: In the qualitative analysis, the method called 'Narrative analysis' was done using "Interview technique". Ten paediatricians are interviewed and the common themes from narrative were analysed.

# **RESULTS**

The study was conducted at Artemis Hospital, Gurugram.

Quantitative: The forms collected has been evaluated and studied which showed the following details.

# **Demographic Analysis**

The average age of doctors is 40.34 years and mean year of experience is 12.19 years. [Table 1]

The average age of the doctors was around 40 years of age. The mean years of experience is around 12 years with majority of doctors with less than or equal to ten years. In my comparison I have used those less than 10 years and more than or equal to 10 years. 181 doctors have experience less than 10 years. [Table 2]

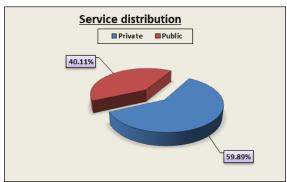


Figure 1: Shows service based distribution

The paediatricians distribution of their present mode of service had 40.11% were working in public service with respect of them working in private sector either under themselves or under an organisation.

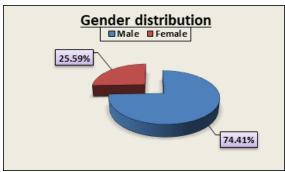


Figure 2: gender distribution

The gender distribution was found that about 25.59 persons belong to the female gender and the rest were of male physicians.

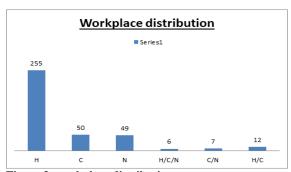


Figure 3: workplace distribution

Most of the forms filled by doctors who work in hospital environment and about 255+6+12=273 were

working in hospital environment either alone or along with other forms of practice.

# Violence at workplace

As per the data collected it has been observed that 69.66% of paediatricians have been a victim of violence according to their perception. While verbal abuse is commonest form of violence is followed by mental harassment and physical one are in this order experienced or witnessed by them.

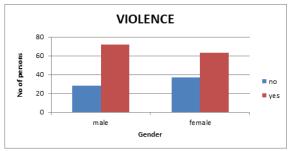


Figure 4: violence faced by paediatrician

71.99% of male doctors has faced violence while 62.89% of female doctors has been a victim of violence. Based on scores there is significant difference in violence faced by male and female doctors as a whole. The t-value is -3.07902. The p-value is .002229. The result is significant at p < .05.

## **Medicolgal Problems**

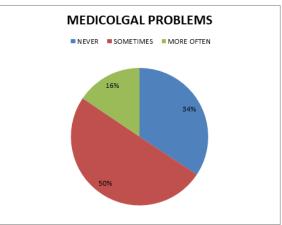


Figure 5: doctors exposed to medico-legal problems

50 % of persons have seen or experienced medicolegal problems and 16 % more often see or experienced medico-legal problems. 34 % never faced or seen medico-legal problems.

Questions

Group – 1(4,5,6,7): regarding attending patients Group – 2(15a,15c,16a,16b): change in attitude/practice/place

Group -3(17,18): defensive practices

98.94% shows change in concerns while attending patients and 87.86% has done changes in mode of practice or place or attitude 96.83% have changes to defensive practices. [Table 3]

Comparison based on experience

Experience of more than or equal to 10 years paediatricians is compared with less experience are less defensive in practices.

The t value is -2.014 and p value is 0.044 for defensive practice. The difference is significant. [Table 4]

#### **Comparing based on Gender**

62.89 % of female doctors have faced violence compared to 71.99% of male doctors. Defensive

practices or change in attitude has no significant difference.

**Comparing hospital and non-hospital-based doctors:** As per the table there is no statistic difference in the perception and practices based on their place of work

Comparing doctors in Public and private services.

**Table 1: Showing Demographics distribution.** 

Male	282	74.41
Female	97	25.59
Experience	$12.19 \pm 9.65$	
Service		
Private	227	59.89
Public	152	40.11
Workplace		
Н	255	67.28
С	50	13.19
N	49	12.92
H/C/N	6	1.58
C/N	7	1.83
H/C	12	3.17

Table 2: distribution as per age

Experience	Numbers	Percentage
0-10	201	53.03
11-20	110	29.02
21-30	51	13.46
≥ 31	17	4.49

Table 3: status of perception about change

Groups	No Change	%	Change	%
1	4	1.06	375	98.94
2	46	12.14	333	87.86
3	12	3.17	367	96.83

Table 4: showing statistics of difference based on experience

Experience <10 yrs/ >=10 years	p value	t value
Attending sick child	0.42	0.778
Attitude/mode of practice	0.28	1.06
Defensive practice	0.044	-2.01

Table 5: showing statistics value of comparison based on gender

	Male/female	
	p value	t value
Attending sick child	0.062	1.973
Attitude/mode of practice	0.284	1.974
Defensive practice	0.802	-0.251

Table 6: showing statistics of comparison based on workplace

Hospital/non-hospital	p value	t value
Attending sick child	0.252	-1.147
Attitude/mode of practice	0.483	-0.701
Defensive practice	0.14	1.46

Table 7: statistic value of comparing public service and private service doctors

	p value	t value
Attending sick child	0.75	-0.314
Attitude/mode of practice	0.89	0.135
Defensive practice	0.0903	1.69

As per the above table there is no statistic difference of perception and defensive practices or changes among the doctors whether they are working in public or private practice.

#### **Internet or online sources**

262/379(69.12%) discuss about diagnosis. 293 out of 379(77%) discuss about investigation. 338 out of

379(89%) discuss about treatment based on online information.

#### **Encourage online formation**

50 % are against people looking for online information. 36 % sometime they support for parents to look for online source. 14% are in favour for online source of information. 55.41% never advocate people to look for online source before or after consultation. 69.39 % do not advocate specific site to look for online information.

260 out of 379(68%) says over investigations done. 332 out of 379 (87%) says results in increased anxiety. 221 out of 379 (58%) feels it helps in parents understanding more. 235 out of 379(62%) says results in non-compliance. 238 out of 379(62%) says results in delay in decision making. 182 out of 379(48%) says results in better decision. 290 out of 379 (76%) says results in unwanted chaos.

### **Investigation demands**

43% says sometimes and 14% almost prescribe the investigations demanded by parents. 43 % never comply with demands of parents for investigations.

## Effects on paediatricians

21.6% of paediatricians regret for taking medicine and 8.44 think of giving up medicine. 69.66% of paediatricians don't think of giving up medicine and nearly half of them never regret for taking medicine.

#### **Defensive medicine**

292 out of 379(77%) says there is increase in investigation. 276 out of 379(72%) says there is increased medication. 273 out of 379(72%) says increased duration. 257 out of 379(67%) says they avoid invasive procedures if possible.

## **Practice Towards Sick Patients**

In sick patients 264 out of 379(69%) says they avoid critical patient. 303 out of 379(79%) says they do early referral of patient. 312 out of 379(82%) says they declare early about uncertainty of treatment.

### **Communication effects of recent changes**

303 out of 379(79%) says there is increased stress during communication. 332 out of 379(87%) says there is increased time in counseling than actually required. 325 out of 379(85%) says there is more anxiety due to excessive information among parents

# 2<sup>nd</sup> opinion

288 out of 379(75%) says 2nd opinion increase the trust on treating physician sometimes or most of the times 255 out of 379(67%) believes the 2nd opinion has the chance of instigating violence or medico-legal problems 362 out of 379(95%) encourage 2nd opinion in sick patient.

# **DISCUSSION**

This dissertation is an observational and analytical cross sectional study. It was conducted at Artemis hospital, Gurugram, Haryana. A minimum of 379 samples were obtained and studied in quantitative study. [10] Doctors are studied for qualitative analysis.

#### **Quantitative Analysis**

A similar study of summerton et al,<sup>[11]</sup> had a response rate of around 60% on defence practices has somewhat similar demographic. My study was taken with assumption of 60 % response rate. Now with 379 respondents the mean age is 40.34 year similar to 40.4year of that study and male gender were 74.41% as against 73 % of the same study.

**Violence:** In our study 69.66% of people have faced violence, this is way more higher than as stated by Anand et al in India and is nearly equal to Magin et all with 59.3% of GPs and 74.6% of non-GPs had experienced work-related violence. Similar to all studies verbal abuse is most common (76.26%)

Anandet al, findings are sixty-nine doctors (40.8%) reported being exposed to violence at their workplace in the past 12 months. However, there was no genderwise difference in the exposure to violence (p=0.86). The point of delivery of emergency services was reported as the most common place for experiencing violence. Verbal abuse was the most common form of violence reported (n=52; 75.4%)

Anand et al study was done in 2016 and mine in 2017-18. The reason for difference could be violence is increasing and may be they are now more aware of the violence happening, while it correlates with multiple studies done in Australia and other nation. Further in my study there is significant difference when based on scores.

Several independent studies all over the world have reported the prevalence of workplace violence among physicians to be 56%–75%.

## **Medico-legal problems**

Majority (around 66% of doctors have faced medicolegal problems. Rest 34% have never faced medicolegal problems

## **Concerns disturbing while Attending patients**

It has been found that while attending children their concerns and distractions has made them that 98.94% thinks that they should worry about other factors in addition to the disease, symptoms or treatment. This in a way shows the addition stress unwanted on the doctors.

#### Change in attitude, practice or place

Doctors who face/witness the issues of violence, medico-legal problems do have change in attitude as they are human beings in stress. But speaking professionalism doesn't mean that stress will not have reaction. 87.86% have done something as change in mode of practice, place or attitude.

## **Defensive Medicine Practices**

96.83% of paediatricians believe the defensive medicine practices are on increase due to violence, medico-legal concerns and continuous scrutiny by parents either to avert the issue or to support them in time of crisis.

## **Comparing Among Doctors**

On classifying doctors based on service, gender and mode of practice in my study it was found that the changes of mode of practice and attitude, attending patients and defensive practices. Experience of 10

years or more has been associated with less defensive practice compared to their counterpart.

**Internet:** Ninety per cent of doctors in study has said they face parents of child with online information which is somewhat close to Murray et all 2003 where eighty-five per cent of all respondents had experienced an occasion when a patient brought information from the internet to a visit.

Half of paediatricians, 50 % are against people looking for online information. Rest either sometime or ok with parents having a look into online information.

69.12% of doctors say the parents of children discuss about diagnosis and 77% says they discuss about investigation while 89% discussions are about management based on online information

Majority 87% feels there is increased anxiety among parents and 76% feels there is unwanted chaos, 68% feels investigations are done in excess, 62 % results in non-compliance and delay in decision making are negative impacts of online information.

Nearly half (48%) of the doctors felt that the online information results at times in better decision making and 58 % feels there is better understandings in parents.

#### Effects on paediatrician

Majority around 70% did not regret taking medicine and half of the participants never thought of giving up medicine.

In a national survey carried out in the USA among neurosurgeons 96% reported practicing defensive medicine. The epidemic of defensive medicine has also spread to Europe where 94% of gastroenterologists and 83% of surgeons and anaesthetist in Italy reported practicing defensive medicine. The situation is even worse in Japan as 98% of survived gastroenterologists also reported practicing at least one or another form of defensive medicine. [13]

#### **CONCLUSION**

The study has shown that deteriorating doctor patient relationship with violence against doctors, medicolegal concerns has increased defensive practices, attitude changes and many doctors have changed from inpatient to OPD only and vice versa. Experience has enabled the doctors to allay defensive practices or defensive practices are more in recent days making the less experienced doctors to be more defensive. Gender, mode of practice, hospital or non-hospital based practice, public or private setup all were affected by the changes and there is no significant difference found in my study.

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