



Original Article

Duration of daily In-Patient contact; A determinant of Empathy level among Healthcare Professionals

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Abstract

Background: Empathy is a core attribute in medical professionals, an essential part of effective understanding and communication among the patient and healthcare professional, and a guarantor of better patient outcomes. Developing a sense of empathy development among healthcare professionals may be fundamental to developing ways to promote this crucial trait.

Objective: It is aimed to study the association of duration of daily in-patient contact with empathy levels among healthcare professionals.

Methodology: This cross-sectional analysis was conducted upon a sample of 114 healthcare professionals (chosen via non-probability - consecutive sampling) at two public sector – tertiary care teaching hospitals in Hyderabad and Jamshoro. After taking written informed consent, data were collected using an anonymous, self-administered questionnaire comprising of questions pertaining to basic biodata, sociodemographic details, professional credentials (i.e., field, designation, work experience, etc.), and particulars of the daily work routine and duration of daily in-patient contact. Empathy was assessed using the "Jefferson Scale of Empathy - Health Professions Version" (Urdu translation). The data obtained was analyzed using SPSS v. 21.0 & Microsoft Excel 360.

Results: The mean age of the sample stood at 34 years (SD \pm 07). 56.1% of the sample comprised males, while 43.9% were females. The types and tiers of professional designations of the respondents included nursing staff (18.42%), trainee doctors (77.1%), and senior consultants (4.48%). The cumulative mean duration of daily in-patient contact stood at 2.5 hours (SD \pm 1.5). The mean duration of in-patient contact notably decreased with increasing seniority and climbing up tiers of professional designation. Synonymously, empathy levels too mirrored a similar trend.

Conclusion: Empathy, a component of interpersonal relationships, seems to thrive when a more prolonged, more sustained contact between the patient and the healthcare professional. Based on our results, it is evident that greater daily patient contact is strongly associated with higher empathy levels. It is thus recommended that more communication be encouraged to foster empathy, which may likely yield many benefits.

Keywords

Healthcare Profession, Empathy Level, In-Patient Care, Jefferson Scale of Empathy.

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Introduction

Empathy is among the fundamental components supporting all meaningful relationships and is often deemed a vital source of motivation for positive social behavior¹. It is a crucial ingredient to first-rate healthcare and among the professional healthcare worker's highest and most desirable attributes². Developing an understanding of the process of empathy development among healthcare professionals is crucial, and identifying the factors promoting and inhibiting empathy development may be the first step in this direction. Sadly though, this area is not well researched³.

Evidence exists to support the claim that empathetic behavior by healthcare professionals is often linked to more positive health outcomes and a more fulfilling healing experience, with fewer complaints about compliance and higher scores, at least in terms of patient satisfaction. Thus guaranteeing better coping, more meaningful conversations, and an overall improved healthcare experience – beginning from an easier and more accurate diagnosis and culminating in a quicker and better treatment, recovery, and rehabilitation⁴⁻⁶.

Evidence-based literature reports instances of superior metabolic status among patients with diabetes mellitus dampened severity and quicker recovery from influenza, and a primarily enhanced physical and mental health of patients across many disease states, when the healthcare professional employed for the care is more empathetic. Benefits have also been reported about more efficient utilization of healthcare resources by empathetic professionals⁷⁻⁹.

Associations working in medical education and other professional organizations across many countries believe that empathy is a desirable trait among healthcare professionals that merits development and promotion¹⁰. Sadly, a recent

systematic review has described a statistically significant decline in the self-assessed empathy among healthcare professionals in 16 of 18 studies from 1990 to 2010¹¹.

Though such trends have been reviewed and described in detail^{12,13}, factors that promote or inhibit the development of empathy or determine an increase or decrease in empathy level have been left largely ignored^{14,15}. The precise factors thus remain largely unknown. However, an understanding of the determinants of empathy is necessary to design "targeted" and evidence-based interventions for promoting and fostering empathy among healthcare professionals¹⁶.

Methodology

This cross-sectional analysis was conducted upon a sample of 114 healthcare professionals (chosen via non-probability - consecutive sampling) at two public sector – tertiary care teaching hospitals in Hyderabad and Jamshoro.

After taking written informed consent, data were collected using an anonymous, self-administered questionnaire comprising of questions pertaining to basic biodata, sociodemographic details, professional credentials (i.e., field, designation, work experience, etc.), and particulars of the daily work routine and duration of daily in-patient contact. Empathy was assessed using the "Jefferson Scale of Empathy - Health Professions Version" (Urdu translation). The data obtained was analyzed using SPSS v. 21.0 & Microsoft Excel 360.

Result

The mean age of the sample stood at 34 years (SD \pm 07). 56.1% of the sample comprised males, while 43.9% were females. The professional designation of the respondents ranged from nursing staff (18.42%) to trainee doctors (77.1%) and consultants (4.48%) (Table 1).

Table 1: Demographic details of the study participants

Professional Designation	Gender		Age (Years) mean \pm SD
	Male; n (%)	Female; n (%)	
Nursing Staff (n=21)	08 (7%)	13 (11.4%)	35 \pm 04
Trainee Doctor (n=88)	House Officer	51 (44.7%)	26 \pm 01
	PG Resident	13 (11.4%)	29 \pm 02
Consultant (n=05)	04 (3.5%)	01 (0.9%)	46 \pm 08

The mean duration of daily in-patient contact stood at 2.5 hours (SD \pm 1.5). The mean duration of in-patient contact decreased with increasing seniority and higher tier of professional designation (Table 2).

Table 2: Mean duration of daily in-patient contact

Professional Designation		In-Patient Contact (Hours)
Nursing Staff		03 \pm 0.5
Trainee Doctor	House Officer	05 \pm 02
	PG Resident	03 \pm 0.5
Consultant		01 \pm 0.5
P-value		< 0.01*

*Highly Statistically Significant (Test applied: ANOVA)

Synonymously, empathy too mirrored a similar trend with level decreasing with increasing seniority and more affluent professional designation (Table 3 & 4).

Table 3: Mean Empathy Level in Nursing Staff

Professional Designation		Empathy Level
Nursing Staff		122 \pm 12
Trainee Doctor	House Officer	116 \pm 10
	PG Resident	97 \pm 06
Consultant		85 \pm 05
P value		< 0.05**

** Statistically Significant (Test applied: ANOVA)

Table 4: Comparison of empathy in groups with highest and lowest in-patient contact

Designation	Mean Empathy Level	P-value
House Officers	116 \pm 10	
Consultants	85 \pm 05	< 0.01*

*Highly Statistically Significant (Test applied: Independent Sample t-Test)

Discussion

Our results show that empathy declines significantly during training since consultants reported less empathy than post-graduate trainees, which had less empathy than their house officers. Published evidence supports this trend, with a decline in empathy consistently found more clearly in the longitudinal studies¹⁷.

It was initially hypothesized that one possible explanation for this phenomenon might be that encountering morbidity and mortality heightens a health professional's feelings of vulnerability. As a result, students and residents may over-identify with patients, causing them to suffer more from distress themselves; they thus become unable to provide rational health care or protect themselves by dehumanizing patients. Consequently, humane

treatment, including empathizing with patients, may suffer^{18,19}.

This explanation corresponds with a recent study of physicians' brains which demonstrated that medical expertise down-regulates the sensory processing elicited by the perception of pain in others. This down-regulation occurs at an early stage, which is thought to reflect empathy's automatic emotional sharing component²⁰.

Another critical experience during initial clinical practice is trainees' increased responsibility for the patient, often guided by their unrealistic expectations that medicine can always cure and that there is always "a right thing" to do²¹.

The stress and burnout that health professionals face too may play a role. Recent neurophysiologic studies on mirror neurons also support this observation and reveal that a physiological correlation is observed, and mirror neurons are noted to be activated upon merely observing a patient's suffering. Links have been unearthed between empathy levels and mirror neuron function. It is also known that negative experiences and tense situations may seriously undermine the signal rate of mirror neurons and dampen empathy levels²²⁻²⁴.

Though this research focused on a novel hypothesis that in-patient contact duration may be a strong determinant of empathy levels, our results strongly support this stance. Duty hours become more flexible with seniority, and the role of a senior consultant is often limited to reviewing the healthcare provided by the junior team and rectifying any errors if notes. Thus, direct patient contact is limited to sort teaching rounds.

Conclusion

Empathy, a component of interpersonal relationships, seems to thrive when a more extended, more sustained contact between the patient and the healthcare professional. Based on our results, it is evident that greater daily patient contact is a strong determinant of higher empathy levels. It is thus recommended that more contact

be encouraged to foster empathy, which may likely yield many benefits.

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