



## Patient Satisfaction in Chamber Setting in Bangladesh measured by Patient-Doctor Relationship Questionnaire (PDRQ-9 Bangla)

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### Abstract

**Background:** Assessment of patient satisfaction is crucial but there is significant lagging in this sector. Patient satisfaction is an important indicator of health care quality as well as a predictor of treatment adherence. The Good patient-doctor relationship is considered as an integral part of the patient satisfaction. In Bangladesh, this domain is yet to be explored in a large scale.

**Aim:** It was aimed to look into the patient satisfaction level in chamber setting in Bangladesh measured using the patient-doctor relationship questionnaire (PDRQ-9 Bangla).

**Methods:** PDRQ-9 is a short yet excellent tool for assessing the patient-doctor relationship. The data collection was done in private chamber setting by the PDRQ-9 and analyzed.

**Results:** Though the result was not completely in line with the existing literature, the PDRQ-9 was found to be a useful and brief measurement tool in the context of the patient-doctor relationship.

**Conclusion:** Large-scale research in this particular aspect of patient satisfaction in future may provide a more succinct result.

**Keywords:** PDRQ-9 Bangla, Patient Satisfaction, Chamber Practice, Doctor-Patient, Bangladesh.

### Introduction

Being as old as the civilization the field of medicine is evolving rapidly [1] but there is a significant lagging in the assessment of patient satisfaction which is considered as equally important as other health measures and a significant indicator of efficiency of health care delivery [2]. As stated by Lender et al. patient satisfaction may be defined as “positive evaluations of distinct dimensions of health care” [3]. A parallel interaction is present in between patient satisfaction, continuity of care, accessibility of treatment and physician, as patient prefer the availability and accessibility of the same physician. The measurement of patient satisfaction is thus useful is assessing the quality of care and also subsequent health-related behaviors and adherence to treatment, at the same time knowing the patient priorities would facilitate the improvement of patient experience [4,5]. Thus patient satisfaction might be considered as an indicator of institutional performance as well as patient’s wish to become more compliance and recommendation for others, which are all related to the socio-demographic condition, the health status of community and more over Patient-Doctor Relationship [6-8].

Patient-Doctor Relationship, a dynamic, vital yet complex interpersonal relationship which has been put under the microscope for quite a long over the century and this mutual relationship is intermingled with the idea of patient satisfaction, compliance with treatment and eventually driving the treatment outcome [9]. Over the time the concept of patient-doctor relationship has evolved a lot and currently, patient-centeredness is the most preferred by the patients

hence the health care provider focuses of patient autonomy and more emphasis over patient satisfaction [10, 11, 12]. Despite being widely advocated, the practicality of patient-centered model is yet under consideration on the basis of time constraint in consultation as the physician has to perform the daunting task of providing comprehensive, coordinated yet satisfactory to the patient and above all make sure the accessibility of the care [13, 14]. Whether being psychiatric or non-psychiatric patient it is reported that successful and both way, a perfect relationship between patient and physician is crucial for the adherence and better outcome of treatment [15].

For assessing the patient-doctor relationship, a brief, concise yet having excellent psychometric characteristics scale has been developed and validated known as the 9-item patient – doctor relationship questionnaire (PDRQ-9) [14-18] which essentially evaluates the therapeutic aspect of the patient-doctor relationship based on the perspective of the patient in the primary health care setting [14,15]. PDRQ-9 gives the opportunity to quantify the communication, level of satisfaction and availability in dealing with the physician in regard to patient’s point of view [18]. Initially validated by Van der Feltz-Cornelis et al. this is to be reported that there is internal consistency among the items of the scale [17] and later was to validated by multiple researchers [14-16,18].

Bangladesh, a developing country having about 160 million people and achieving the health-related goal of MDG but lacking significantly in regard to conceptual similarity in health services between physician and patients, hence there exists

violence against the doctor and lack of compliance with treatment and eventually patient satisfaction [1,9,19,20]. But unfortunately, there is little to be found in terms of literature regarding the patient satisfaction and patient-doctor relationship. So the authors aimed to look into the patient satisfaction level in public hospital and private chamber setting in Bangladesh measured using the patient-doctor relationship questionnaire (PDRQ-9 Bangla).

**Methods**

**Setting:** The data collection procedure was carried out in 3 different hospitals by 3 different physicians.

**Instrument:** The Bangla version of 9 item based Patient-Doctor Relationship Questionnaire (PDRQ-9) was used as the tool for questioning patients which have 5 points Likert-type scale from 1: not at all appropriate, to 5: totally appropriate.

**Design and Subject:** The study was carried out in the outpatient department of Dhaka Medical College and some private chambers in the city of Dhaka over the period of January 2016 to December 2016 from 214 patients with the Bangla version of Patient-Doctor Relationship Questionnaire (PDRQ-9) with purposive sampling. The filling out of the questionnaire was totally voluntary and completed by the participant themselves and assistance was provided to respondents who were not able to understand any question. Patients who were willing to participate and able to understand Bangla were included in the study and patients who were not willing were excluded. After proper collection of data, the analysis was done by SPSS 16 and Microsoft Excel 2010.

**Data Collection Method:** Self-reporting PDRQ-9 Bangla questionnaire and providing assistance when the patient could not understand the questionnaire.

**Results**

**Demographic Picture of the Respondents:** In this study, authors considered age, gender, religion, residence, educational qualification, monthly income, marital status, occupation and family type as demographic variables.

Age of the respondents was found Mean ± SD (Range): 37± 9.92 (14-65) years; 40.2 % respondents were male and 59.8% female; 57.8% resided in urban area where as 14.3% in suburb and 28 % in village; 78.7% were married and 19.9% were unmarried; 52.8% belonged to nuclear family and 45.8% were from joint family (Table 1).

Demographic Variables					
Age	Completed years	%	Gender	Gender	%
	14-25	29.3		Male	40.2
	26-35	26.9	Religion	Female	59.8
	36-45	20.7		Religion	%
	46-55	10.7		Islam	93
	56-65	11.7	Marital Situation	Sanatan	7
Mean ± SD (Range)	37± 9.92	Status		%	
Residence	Area	%	Marital Situation	Unmarried	19.9
	Urban	57.8		Married	78.7
	Suburban	14.3		Widow	0.5
	Village	28		Divorced	0.5
Edu. Qualification	Status	%	Occupation	Status	%
	Below SSC	40.9		Student	32.2
	SSC	16.2		Service Holder	16.4
	HSC	18.8		Business	7.5
	Graduation/ Equivalent	12.3		Housewife	23.8
	Post graduation	11.7		Others	7.9
Monthly Family Income	Taka	%	Family	Family Type	%
	<5000	1.73		Nuclear	52.8
	5000-10000	10.98		Joint Family	45.8
	10000-15000	15.03			
	15000-20000	12.14			
	20000-25000	13.29			
	25000-30000	24.28			
	>30000	21.97			

Table 1. Demographic Distribution of the respondents (n=214)

The level of satisfaction among the Respondents. Among the 9-items of the PDRQ-9, there was a general trend of the mean being about 4.17 to 4.50.

The lowest mean was found in the 9th question “I find my physician easily accessible” which was 3.86. “I trust my physician” the 3rd item had the highest mean of 4.50.

The Standard deviation for the items was around 0.99 to 3.53. 5th question “My physician is dedicated to help me” had the highest standard deviation of 3.53 (Table 2).

Statistics	Q-1	Q-2	Q-3	Q-4	Q-5	Q-6	Q-7	Q-8	Q-9
Mean	4.29	4.35	4.50	4.17	4.44	4.23	4.31	4.28	3.86
Median	5	5	5	4	4	4.5	5	5	4
Mode	5	5	5	5	5	5	5	5	5
Std. Deviation	0.99	0.99	0.85	0.97	3.53	0.91	1.02	1.06	1.17
Minimum	1	1	1	1	1	1	1	1	1
Maximum	5	5	5	5	5	5	5	5	5

Table 2. Level of satisfaction in regards to item wise responses (n=214)

**Distribution of responses:** Among all the 9 items and 5 responses, there was an overall tendency of answering the 5th option “totally appropriate” by the respondents as evident by the frequency ranging from 42.06% to 68.69% which were the highest for all the 9-items. “Not at all appropriate” had the lowest frequency ranging around 0.93% to 3.74%. Other three options had all most equal distribution though a greater tendency for the “mostly appropriate” was observed (Table 3).

## Discussion

Patient-Doctor Relationship is a strong indicator of patient satisfaction as well as the predictor of treatment adherence and quality of health care. Patient satisfaction, on the other hand, depends largely on the availability of care and caregiver. Patient-Doctor Relationship Questionnaire-9 (PDRQ-9) is a brief and excellent tool for assessing the quality of patient-doctor relationship on the regards of patient’s experience and therefore a useful instrument for measuring patient satisfaction.

Originally developed by Van Der Feltz-Cornelis et al., in 2004, it was based on Helping Alliance Questionnaire of Luborsky (HAQ), a scale that measures the therapeutic alliance in psychotherapy [17]. Later, numerous attempts were taken to validate PDRQ-9 in different languages. Ad’an et al. validated

the Spanish version and Mergen et al. in 2012 validated the Turkish version, in 2014 Zenger et al. validated the German version of PDRQ-9 and in 2016 Arafat validated the Bangla version which was the tool for this particular study [16-18,21,22].

On demographic basis Age of the respondents was found Mean  $\pm$  SD (Range): 37 $\pm$  9.92 (14-65) years which was close enough to the Bangla validation study where Age of the respondents was found as mean  $\pm$  SD (range): 35.6  $\pm$  10.71 and also with Nigerian version where mean age was 40.12 but not consistent with the German validation where Mean age was 50.58 for men and 50.87 for women and also in this particular study 52.8% respondents belonged to nuclear family and 45.8% were from joint family which also aligned with the Bangla validation study where 52% had nuclear family and 48% belonged to joint family environment [16, 18]. 40.2 % respondents were male and 59.8% female which was not in line with the Bangla version where 62% were male and 38% were female but was close to the Nigerian validation where male sex frequency was 47.6% and the female was 52.4%[15, 18].The origin of the respondents which in this study was 57.8% from an urban area where as 14.3% from suburb and 28 % from the village, but in the Bangla Validation version 64% lived in town, 16% in mini town, and 20% in the village [18].

On the 9-items the Mean was found 4.29, 4.35, 4.50, 4.17, 4.44, 4.23, 4.31, 4.28 and 3.86 respectively which were not consistence with either the original Dutch or later validated Spanish, Turkish, Nigerian or Bangla version [15,17, 18, 22] but the German Validation study showed means of the 9-items which were almost similar to this study[16]. It was seemed to be found that the respondents chose to answer “mostly appropriate” in this particular study.

However, as observed by Arafat SMY et al, most of the people in Bangladesh has the perception that the role of the physicians here are motivated by financial gain only and thus not fully justified which often leads to violence against doctor as well as the health services providers which do not completely fit with the result of this particular study [9]. Also, the doctor lives a hectic life in the country and the overwhelming number of patients per physician also make it difficult to provide quality and patient-centered care [1]. The overall result of the study might not reflect the picture on basis of the currently available literature in this context.

## Limitations of the Study

The majority of the data was collected from private chamber setting which might have been the cause of a result not in line with the other articles. Moreover, in some respondents assistance was provided to fill out the questionnaire.

	Not at all appropriate	Somewhat appropriate	Appropriate	Mostly appropriate	Totally appropriate	Total
Item	F (%)	F (%)	F (%)	F (%)	F (%)	F (%)
Q 1	4 (1.87)	11 (5.14)	26 (12.15)	51 (23.83)	122 (57.01)	214 (100)
Q 2	2 (.93)	16 (7.48)	20 (9.35)	43 (20.09)	133 (62.15)	214 (100)
Q 3	3 (1.40)	3 (1.40)	24 (11.21)	37 (17.29)	147 (68.69)	214 (100)
Q 4	4 (1.87)	10 (4.76)	30 (14.02)	71 (33.18)	99 (46.26)	214 (100)
Q 5	2 (.93)	15 (7.01)	22 (10.28)	71 (33.18)	103 (48.13)	214 (100)
Q 6	2 (.93)	6 (2.80)	40 (18.69)	59 (27.57)	107 (50)	214 (100)
Q 7	3 (1.40)	17 (7.96)	19 (8.88)	47 (21.96)	128 (59.81)	214 (100)
Q 8	6 (2.80)	14 (6.54)	20 (9.35)	49 (22.90)	125 (58.41)	214 (100)
Q 9	8 (3.74)	19 (8.88)	58 (27.10)	39 (18.22)	90 (42.06)	214 (100)

Table 3. Distribution of responses of PDRQ-9 Bangla items

## Conclusion

The result from the analysis indicated a better level of satisfaction among the patients which was not quite in line with the premeditated concept of the authors as it did not fall in line with the available data. Despite this fact, the Bangla validated the version of PDRQ-9 was found as a very helpful as an instrument for assessing the relationship between patient and doctor in a very short time and both in public and private health care facility. As the scale bears only patients perspective it was very proficient for measuring patient satisfaction. In a developing country like Bangladesh, future large-scale studies to substantiate the findings of this particular study and further evaluate the patient satisfaction on the basis of patient-doctor relationship may provide a clearer picture.

## References

1. Andalib A, Arafat SMY. Practicing Pattern of Physicians in Bangladesh. *International Journal of Perceptions in Public Health*. 2016;1(1):9–13.
2. Linda .MS P, editor. PATIENT SATISFACTION SURVEYS FOR CRITICAL ACCESS HOSPITALS. First ed. 1607 West Jefferson Street Boise, Idaho 82702: 2001.
3. Linder-Pelz S. Toward a theory of patient satisfaction. *Social Science & Medicine*. 1982 Jan;16(5):577–82.
4. Raivio R, Jääskeläinen J, Holmberg-Marttila D, Mattila KJ. Decreasing trends in patient satisfaction, accessibility and continuity of care in Finnish primary health care – a 14-year follow-up questionnaire study. *BMC Family Practice*. 2014 May 15;15(1).
5. Paddison CAM, Abel GA, Roland MO, Elliott MN, Lyratzopoulos G, Campbell JL. Drivers of overall satisfaction with primary care: Evidence from the English general practice patient survey. *Health Expectations*. 2013 May 30;18(5):1081–92.
6. Koné Péfoyo AJ, Wodchis WP. Organizational performance impacting patient satisfaction in Ontario hospitals: A multilevel analysis. *BMC Research Notes*. 2013;6(1):509.
7. Jackson JL, Chamberlin J, Kroenke K. Predictors of patient satisfaction. *Social Science & Medicine*. 2001 Feb;52(4):609–20.
8. Rahmqvist M, Bara A. Patient characteristics and quality dimensions related to patient satisfaction. *International Journal for Quality in Health Care*. 2010 Feb 3;22(2):86–92.
9. Arafat SMY. Doctor Patient Relationship: an Untouched Issue in Bangladesh. *International Journal of Psychiatry*. 2016 Jul 16;1(1):2.
10. Kaba R, Sooriakumaran P. The evolution of the doctor-patient relationship. *International Journal of Surgery*. 2007 Feb;5(1):57–65.
11. Ridd M, Shaw A, Lewis G, Salisbury C. The patient–doctor relationship: A synthesis of the qualitative literature on patients’ perspectives. *British Journal of General Practice*. 2009 Apr 1;59(561):116–33.
12. Bensing JM, Tromp F, van Dulmen S, van den Brink-Muinen A, Verheul W, Schellevis FG. Shifts in doctor-patient communication between 1986 and 2002: A study of videotaped general practice consultations with hypertension patients. *BMC Family Practice*. 2006 Oct 25;7(1).
13. Little P, Everitt H, Williamson I, Warner G, Moore M, Gould C, Ferrier K, Payne S. Observational study of effect of patient centredness and positive approach on outcomes of general practice consultations. *BMJ*. 2001 Oct 20;323(7318):908–11.
14. Porcerelli JH, Murdoch W, Morris P, Fowler S. The Patient–Doctor relationship questionnaire (PDRQ-9) in primary care: A validity study. *Journal of Clinical*

- Psychology in Medical Settings. 2014 Aug 9;21(3):291–6.
15. Aloba O, Esan O, Alimi T. Psychometric qualities of the 9 item patient doctor relationship questionnaire in stable Nigerian patients with schizophrenia. Journal of Behavioral Health. 2015;4(4):112.
  16. Zenger M, Schaefer R, van der Feltz-Cornelis C, Brähler E, Häuser W. Validation of the patient-doctor-relationship questionnaire (PDRQ-9) in a representative cross-sectional German Population survey. PLoS ONE. 2014 Mar 17;9(3):e91964.
  17. Van der Feltz-Cornelis CM, Van Oppen P, Van Marwijk HWJ, De Beurs E, Van Dyck R. A patient-doctor relationship questionnaire (PDRQ-9) in primary care: Development and psychometric evaluation. General Hospital Psychiatry. 2004 Mar;26(2):115–20.
  18. Arafat SMY. Psychometric validation of the Bangla version of the patient-doctor relationship questionnaire. Psychiatry Journal. 2016;2016:4.
  19. Uddin MS, Ahmed MSR, Arafat SMY. Does mind exist in physician's mind? A brief phone survey in Bangladesh. International Journal of Neurorehabilitation. 2016;03(06):234
  20. Arafat SMY, Uddin MS, Chowdhury EZ, Huq N, Choudhury SR, Chowdhury MHR. Demography and Diagnosis of Patients Received Emergency Medical Service from Two Private Psychiatric Hospital in Dhaka City. Int J Neurorehabilitation. 2016;3(6):240.
  21. Mergen H, Van der Feltz-Cornelis CM, Karaoğlu N, Ongel K. Validity of the Turkish patient-doctor relationship questionnaire (PDRQ-Turkish) in comparison with the Europe instrument in a family medicine center. Healthmed. 2012 Feb;6(5):1763–70.
  22. J. C. Mingote A, B. Moreno J, R. Rodríguez C, M. Gálvez H, P. Ruiz L. Psychometric validation of the Spanish version of the Patient-Doctor Relationship Questionnaire (PDRQ). Actas Esp Psiquiatr. 2009;37(2):94–100.

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