

The Patient-Physician Relationship and Adherence: Observations From a Clinical Study

Patrick O. Perche BS,^a Rohan Singh BS,^a Madison K. Cook BS,^a Katherine A. Kelly BS,^a
Esther A. Balogh MD,^a Irma Richardson MHA,^a Steven R. Feldman MD PhD^{a,b,c}

^aCenter for Dermatology Research, Department of Dermatology, Wake Forest School of Medicine, Winston-Salem, NC

^bDepartment of Pathology, Wake Forest School of Medicine, Winston-Salem, NC

^cDepartment of Social Sciences & Health Policy, Wake Forest School of Medicine, Winston-Salem, NC

ABSTRACT

Improved patient-physician relationships (PPR) are associated with better patient satisfaction and disease outcomes, however, there is limited literature assessing how PPR affects adherence in dermatology. We recruited 30 subjects with a clinical diagnosis of rosacea. Subjects were instructed to use ivermectin 1% cream once daily for 3 months and adherence was measured using the Medication Event Monitoring System cap. The Patient-Doctor Relationship Questionnaire (PDRQ-9), a validated questionnaire assessing patients' perceived strength of the relationship with their doctor, was completed. Mean adherence for all subjects over three months of the study was 62%. PDRQ-9 scores positively correlated with adherence rates for 3 months of treatment ($r(26)=0.52$; $P=0.006$). The perceived strength of the PPR may have a role in patients' adherence to their medications. Improving the PPR, through empathy and effective communication, may facilitate better medication adherence and treatment outcomes.

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INTRODUCTION

Adherence in dermatology can be very poor, particularly with topical medications and complex treatment regimens.¹ Improved patient-physician relationships (PPR) are generally associated with better patient satisfaction, disease outcomes, and also adherence.² However, there is limited literature assessing how PPR affects adherence in dermatology.³ We assessed how patient-reported PPR affects adherence in a clinical study of patients with rosacea.

MATERIALS AND METHODS

After Institutional Board Review approval (IRB00062694), 30 subjects with a clinical diagnosis of rosacea were recruited from the Atrium Health Wake Forest Baptist Department of Dermatology clinics. Subjects were instructed to use ivermectin 1% cream once daily for 3 months with visits at baseline and 3-month follow-up. The Medication Event Monitoring System (MEMS®), a cap with an electronic device that records the time and date of cap removal, was used to measure adherence over a 3-month period.⁴ Subjects were not informed about the adherence monitoring until the end of study. The Patient-Doctor Relationship Questionnaire (PDRQ-9), a validated questionnaire assessing patients' perceived strength of the relationship with their doctor, was completed at the follow-up visit (Table 1).³ The PDRQ-9 consists of 9 questions, each graded on a 1-5 Likert scale (1 = not at all appropriate, 2 = somewhat appropriate, 3 = appropriate, 4 = mostly appropriate, 5 = totally appropriate),

with a range of 9 to 45; higher scores indicate greater strength of PPR (Table 1). Three subjects were excluded (two lost to follow-up and one failure to follow protocol). Data were stratified based on PDRQ-9 scores of ≤ 36 and ≥ 37 , age < 50 and ≥ 50 , and gender. Differences in group comparisons were analyzed with Student's t-test and correlation between PDRQ-9 and adherence

TABLE 1.

Mean Patient-Doctor Relationship Questionnaire (PDRQ-9) Score by Question and Total Score for Low PDRQ-9 (≤ 36) and High PDRQ-9 Groups (≥ 37)		
	Low PDRQ-9 Group Mean (n=10)	High PDRQ-9 Group Mean (n=17)
My physician helps me	3.4	4.9
My physician has enough time for me	3.4	4.8
I trust my physician	3.4	4.9
My physician understands me	3.2	4.8
My physician is dedicated to help me	3.6	4.8
My physician and I agree on the nature of my medical symptoms	3.1	4.7
I can talk to my physician	3.6	4.9
I feel content with my physician's treatment	3.4	4.8
I find my physician easily accessible	3.3	4.8
Total PDRQ-9 Score	30.4	43.4

TABLE 2.

Mean Adherence by Age, Gender, and Patient-Doctor Relationship Questionnaire (PDRQ-9) Score for Subjects With Rosacea Receiving Ivermectin Cream 1%

Mean adherence for < 50 years old (n=13)	Mean adherence for ≥ 50 years old (n=14)	Mean adherence for females (n=19)	Mean adherence for male (n=8)	Mean adherence for PDRQ-9 ≥ 37 (n=17)	Mean adherence for PDRQ-9 ≤ 36 (n=10)
64%	58%	59%	66%	70%	45%

was assessed using a univariate linear regression model. Data was analyzed using the SAS Software 9.4.

RESULTS

Subjects were mean age 62 years (median 50 years), 93% Caucasian, and 70% female. Mean adherence for all subjects over three months of study was 62% (median 66%). Mean PDRQ-9 score for all subjects was 38.5 (median 40). Subjects who perceived a weaker PPR (≤ 36 , $n=10$) were less adherent over 3 months, with an average adherence rate of 45%, compared with subjects who perceived a stronger PPR (≥ 37 , $n=17$), with an average adherence rate of 70% ($P=0.03$). PDRQ-9 scores positively correlated with adherence rates for 3 months of treatment ($r(26)=0.52$; $P=0.006$). Adherence did not vary by age or gender ($P=0.59$ and 0.51 , respectively; Table 2).

DISCUSSION

Subjects with a stronger perceived PPR had greater adherence over three months of treatment. The perceived strength of the PPR may have a role in patients' adherence to their medications. Improving the PPR, through empathy and effective communication, may facilitate better medication adherence and treatment outcomes.⁵

DISCLOSURES

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AUTHOR CORRESPONDENCE

Patrick O. Perche BS

E-mail:..... patrickperche@ufl.edu