

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

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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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