LETTERS

Concise Research Reports

A Randomized Trial to Improve Communication between Patients and Providers in a Primary Care Walk-In Clinic

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INTRODUCTION

Effective communication is essential to high-quality care.¹ In a previous pre-post trial among 500 adults presenting to a primary care walk-in clinic with a physical symptom, we provided pre-visit feedback to providers on patients' serious illness worry and visit expectations and the presence of any comorbid mental illness.² Intervention patients had fewer unmet expectations and were less likely to be perceived as difficult by their physician. We found that unmet expectations were strong predictors of satisfaction,^{3,4} and worry correlated with psychiatric illness.⁵ The purpose of this trial was to replicate these findings using a more rigorous study design.

METHODS

We randomized adults presenting to a primary care walk-in clinic with a physical symptom (excluding upper respiratory illness, $n = 187$) to two groups: usual care versus providers who received pre-visit information on patient serious illness worry, patient expectations for the visit (testing, counseling, diagnosis, treatment), and whether the patient had depression, anxiety or somatization. We used the same instruments and clinics as in our previous trial.² Pre-visit, written patient surveys assessed symptom characteristics, illness worry, stress, functional status (Medical Outcomes Study [MOS] SF-6), depression (Patient Health Questionnaire [PHQ]-9), anxiety (7-item Generalized Anxiety Disorder scale [GAD-7]) and somatization (PHQ-15). Immediately post-visit patient surveys assessed satisfaction (VSQ-9) and trust (Trust in Physician-7), residual illness worry and unmet expectations. Surveys at 2 weeks assessed persistent worry, unmet expectations, satisfaction, functional status and symptom outcome; these surveys were mailed, with phone follow-up of non-responders. Immediate post-visit physician surveys assessed patient difficulty (Difficult Doctor–Patient Relationship Questionnaire [DDPRQ]). In addition, all providers attended a 2-h workshop on the importance of using this information to address worry, expectations and managing patients with psychiatric disorders. Providers were capped at 10 patients per

arm. Our study was approved by the Walter Reed institutional review board (IRB). Sample size calculations were based on achieving the same reduction in patient difficulty as in our previous trial.¹

RESULTS

We enrolled 250 adults. Patients were managed by 24 primary care providers. There were no significant differences between arms (Table 1). Patients had experienced their symptoms for 14 days, and most (62%) were worried that their symptoms could be serious. Illness worry declined immediately post-visit (25%), though it rebounded to 41% by 2 weeks. Most patients had pre-visit encounter expectations. Our intervention had no impact on any outcome, including illness worry, unmet expectations, patient satisfaction either immediately post-

Table 1 Participant Characteristics

	Intervention ($n = 128$)	Control ($n = 120$)	<i>P</i>
Age	51.6	52.3	0.29
Female, %	55%	44%	0.69
Ethnicity			
White	55 (43%)	54 (45%)	0.70
Black	54 (42%)	55 (46%)	
Asian	9 (7%)	5 (4%)	
Hispanic	6 (5%)	4 (3%)	
Serious illness worry, no. (%)	86 (67%)	70 (58%)	0.15
“Are you worried that your symptom could be due to a serious illness?”			
Stress, no. (%)	59 (46%)	62 (52%)	0.38
“In the past 2 weeks, have you been experiencing stress?”			
Patient visit expectations			0.99
Diagnosis	101 (79%)	96 (80%)	0.60
Estimated duration of symptom	88 (69%)	79 (66%)	
Physical examination	56 (44%)	56 (47%)	
Tests	96 (75%)	82 (68%)	
Treatment	65 (51%)	58 (48%)	0.83
Referral	51 (40%)	48 (40%)	
Functional status (MOS SF-6)	22.2	22.5	
Pain severity (0–10), mean	3.6	3.8	
Symptom duration (median)	15.5	14	0.83
Somatization (PHQ-15, 0–15)	3.6	3.9	0.92
Mental illness (depression or anxiety)	44 (28%)	32 (27%)	0.83

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Table 2 Outcomes

	Intervention (n = 128)	Control (n = 120)	P
Immediately post-visit			
Residual serious illness worry, no. (%)	28 (22%)	35 (29%)	0.19
Unmet patient visit expectations			
Diagnosis	37 (29%)	40 (33%)	0.45
Estimated duration of symptom	59 (46%)	65 (54%)	
Physical examination	11 (9%)	2 (2%)	
Tests	9 (7%)	4 (3%)	
Treatment	3 (2%)	0 (0%)	
Referral	5 (4%)	6 (5%)	
Fully satisfied	87 (69%)	70 (70%)	0.12
Patient considered “difficult” by provider	19 (15%)	22 (18%)	0.46
2-week follow-up			
Symptom outcome			
Gone	27 (21%)	26 (22%)	0.68
Better	65 (51%)	54 (45%)	
Same	29 (23%)	35 (29%)	
Worse	5 (4%)	4 (3%)	
Residual serious illness worry	49 (38%)	56 (47%)	0.18
Pain severity (0–10), mean	3.4	3.5	0.84
Fully satisfied, no. (%)	76 (63%)	74 (62%)	0.71
Functional status (MOS SF-6)	23.6	23.6	0.99

visit or at 2 weeks, and 2-week symptom outcome (Table 2). There was also no difference between the groups in the likelihood of patients being labeled as difficult by their provider.

DISCUSSION

Our intervention had no impact on worry, satisfaction, functional status or symptom outcome over 2 weeks of follow-up. It also had no effect on the percentage of patients perceived as “difficult” by providers. While disappointing, our results are not surprising. One review of 35 randomized trials of interventions to alter patient–provider interactions found that provider behaviors were difficult to change, and most trials had little impact on patient outcomes.⁶

Moreover, our educational intervention was brief and our intervention was weak. It is possible that other factors played a larger role in outcomes or that there was a spillover effect, since both groups received the workshop. The previously observed improved patient outcomes are harder to explain, since patients did not know which arm they were in. However, it is common for randomized trials to see less impressive results than those in trials using quasi-experimental methods. Our previous trial results could have been due to chance, particularly given the large number of outcomes assessed. Improving patient–provider communication has proven to be an elusive goal.

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Compliance with Ethical Standards:

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