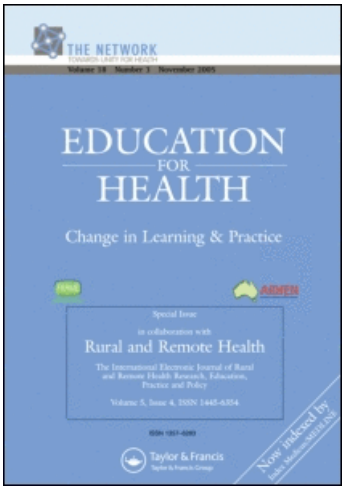

Education for Health

Publication details, including instructions for authors and subscription information:
http://www.informaworld.com/smpp/title~content=t713416292

Point-of-view writing: A method for increasing medical students' empathy, identification and expression of emotion, and insight

Johanna Shapiro [a]; Lloyd Rucker [ab]; John Boker [a]; Desiree Lie [a]
[a] Department of Family Medicine, [b] Department of Medicine, University of California Irvine Medical Center, Orange, California, USA

To cite this Article Shapiro, Johanna, Rucker, Lloyd, Boker, John and Lie, Desiree(2006) 'Point-of-view writing: A method for increasing medical students' empathy, identification and expression of emotion, and insight', Education for Health, 19: 1, 96 — 105
To link to this Article: DOI: 10.1080/13576280500534776
URL: http://dx.doi.org/10.1080/13576280500534776

Education for Health,
Vol. 19, No. 1, March 2006, 96–105

Taylor & Francis
Taylor & Francis Group

ORIGINAL RESEARCH PAPER

Point-of-View Writing: A Method for Increasing Medical Students' Empathy, Identification and Expression of Emotion, and Insight

JOHANNA SHAPIRO[1], LLOYD RUCKER[1,2], JOHN BOKER[1] & DESIREE LIE[1]

[1]Department of Family Medicine, and [2]Department of Medicine, University of California Irvine Medical Center, Orange, California, USA

ABSTRACT **Context:** *Although interest exists among medical educators in using writing that reflects on clinical experience to enhance medical students' communication skills, empathy, and overall professionalism, little empirical research documents the value of this approach. This study explored whether students trained in one type of writing would first demonstrate increased awareness of emotional aspects of a clinical encounter in their writing; and second, be evaluated more positively in an OSCE situation by standardized patients.*

Method: *Ninety-two students were assigned to either a point-of-view writing or a clinical reasoning condition as part of a second year doctoring course. At the end of the year, students were evaluated in an OSCE format on 3 cases, and completed a writing assignment about an ER death from cardiac arrest. Student essays were scored according to presence or absence of various themes. A linguistic analysis of the essays was also performed. Point-of-view and clinical reasoning group scores were compared on both measures, as well as on the standardized patient OSCE ratings.*

Results: *Students trained in point-of-view writing demonstrated significantly more awareness of emotional and spiritual aspects of a paper case in a writing assignment than did students trained in clinical reasoning. By contrast, students in the clinical reasoning group were more likely to distance from the scenario. The two groups did not differ on SP OSCE ratings.*

Conclusion: *Training in point-of-view writing can improve medical students' written skills on certain affective dimensions. It is not clear that these skills can translate into clinical behavior.*

KEYWORDS *Medical humanities, point-of-view writing, empathy, OSCE.*

Author for correspondence: Johanna Shapiro, PhD, Department of Family Medicine, UC Irvine Medical Center, 101 City Drive South, Rte 81, Bldg 200, Ste 512, Orange, CA 92868, USA. Tel: +1 949 824 3748. Fax: +1 949 824 3028. E-mail: jfshapir@uci.edu

Education for Health ISSN 1357-6283 print/ISSN 1469-5804 online © 2006 Taylor & Francis
http://www.tandf.co.uk/journals
DOI: 10.1080/13576280500534776

Context

Increasing interest exists in the possibility that using writing such as critical incident reports or other narratives (Branch, Pololi *et al*., 2001; DasGupta & Charon, 2004) to reflect on clinical experiences might enhance medical students' communication skills, empathy, overall professionalism, and sense of wellbeing. However, little empirical research documents the value of this approach. Some evidence suggests that such writing can increase medical students' self-perceived empathy and professionalism (Hatem & Ferrara, 2001; Henderson, 2002; Rucker & Shapiro, 2003). Yet, a recent study comparing the effects of writing a critical incident report to a one-on-one faculty interview concluded that students in the writing condition performed significantly *less* well in terms of successfully identifying and probing professional issues (Baernstein & Fryer-Edwards, 2003). Other research indicates that writing about traumatic events is related to improved physical and psychological well-being in various clinical and other populations (Pennebaker & Seagal, 1999; Smyth, Stone *et al*., 1999). Although most of these studies have described writing efforts in the United States, this method should have value for medical trainees in other countries as well, especially those where there is an interest in innovative approaches to teaching intangible humanistic attitudes (Blasco, Moreto *et al*., 2005; Rivera, Borasky *et al*., 2005).

The question remains as to whether training in a particular writing technique compares favorably or unfavorably to other methods of instruction in terms of relevant student outcomes. To explore this question, we compared students participating in either a point-of-view writing condition or a clinical reasoning condition. Point-of-view (POV) writing teaches students how to write from the patient's emotional and social perspective about his or her illness and its consequences (Charon, 2000). Clinical reasoning (CR) was defined as a method of medical decision-making emphasizing identification of key clinical elements, pattern recognition, development and justification of initial interpretations, revision of interpretations based on additional information, and final evaluation and assessment (Mandin, Jones *et al*., 1997). We examined differences in the way students wrote about a paper clinical encounter on several expressive and relational parameters. We also looked at differences in the way students were evaluated by standardized patients as part of an Objective Structured Clinical Examination (OSCE). Because this was an exploratory study, we did not formulate specific hypotheses about relationships among the variables under investigation. This project was reviewed and approved by our university's human subjects institutional review board.

Method

Subjects were 92 second year, preclinical medical students enrolled in a required doctoring course teaching interviewing skills, physical examination,

and clinical reasoning. The course used standardized patients (SPs) to present eight organ-based clinical problems.

Procedures. Students were assigned by the course director to participate in one of 12 small groups with either a point-of-view writing ($n = 47$) or a clinical reasoning ($n = 45$) emphasis. Groups were balanced by gender and included students of varying academic abilities according to their first year performance. These groups were then randomly designated for either the point-of-view writing ($n = 47$) or clinical reasoning ($n = 45$) conditions. There were no differences in gender, age, or ethnicity between the two conditions (see Table 1).

The small groups met twice monthly for 8 months to interview SPs, review communication skills, and learn differential diagnosis. Each small group was co-taught by a physician and a non-physician. The physicians were drawn mainly from primary care specialties, while the non-physicians represented basic science and allied health disciplines. There was no systematic bias identified in terms of either the quality or type of facilitators in either the POV or the CR conditions. Although only a handful of basic scientists participated in the course, there was approximately equal distribution of basic scientists and allied health professionals in both conditions; and faculty in one condition were not evaluated differently by students than faculty in the other condition.

All small groups engaged in clinical reasoning, and all small groups read literary selections pertinent to each module (e.g., a module presenting a patient with lung cancer also included poems about this diagnosis). In the POV

Table 1. Demographic information on students in the POV writing and clinical reasoning conditions

Student group	Sex Female	Mean age	Ethnicity*			Specialty**		
			W	A	Other	PC	Non-PC	DK
Clinical reasoning ($n = 45$)	21	27.92	25	13	7	23	19	3
Point-of-view writing ($n = 47$)	23	26.95	21	13	13	21	23	3

*W = white; A = all Asian, including Chinese, Japanese, Korean, Vietnamese; Other includes Hispanic, Black, East Indian, Filipino, and declines to state. **PC = primary care, including internal medicine, family medicine, pediatrics, obstetrics-gynecology; Non-PC = specialties including anesthesiology, dermatology, emergency medicine, ophthalmology, otolaryngology, orthopedics, pathology, physical medicine and rehabilitation, psychiatry, radiology, surgery, urology; DK = unknown (MD/PhD students who have not yet graduated; and students who have not graduated for other reasons).

condition, students wrote one essay each month from the point of view of either the SP in that module or one of the patients described in the accompanying literary material. The CR students wrote one essay monthly describing the clinical reasoning process they used to reach a differential diagnosis for each module patient. The essays for both groups were of equal length, and were read and commented on by faculty preceptors. In all other respects, the two groups were equivalent educationally. Students from both conditions also attended regular lectures on various topics as a large group.

As part of their final course evaluation, students participated in a clinical skills appraisal consisting of 3 cases in an OSCE format. SPs assessed student performance on communication, physical examination, and professionalism, and also reported their overall satisfaction with the encounter.

After completing an OSCE station of a middle-aged man with cardiac risk factors who presented with chest pain, students read a prose-poem by cardiologist and poet John Stone (Stone, 1985) describing an emergency room encounter with a middle-aged man who succumbs to a heart attack. Students had 15 minutes to write a first-person narrative from the perspective of the treating physician.

Measures. One author (JS) developed thematic codes for analyzing students' writing samples that measured 11 distinct dimensions. Essays were dichotomously scored for either presence or absence of these themes. Two undergraduate students, blinded to the students' group assignment, were trained to use this coding instrument, and achieved an overall interrater agreement of 85% on 20 essays independently scored by both. Discussion with JS was utilized to resolve all disagreements. Raters also scored each essay for overall empathy and insight (1 = none . . . 4 = a great deal).

We also coded each essay using the Linguistic Inquiry and Word Count (Pennebaker *et al.*, 2001). This method of analyzing verbal and written speech samples provides word counts, expressed as a percentage of total words in the sample, in 84 different categories, including various emotional, cognitive, structural, and process components. The instrument has excellent content validity and internal consistency reliability (Cronbach's coefficient alpha).

Finally, SPs in each OSCE station rated students on 5 communication skills; a global professionalism item (''student appeared professionally competent''); and recorded a global satisfaction score for each encounter (''I was satisfied with this encounter''). All scores used scales ranging from 1–5 (1 = not at all . . . . 5 = very much).

Data Analysis. The thematic codes for POV and CR groups were compared using exact chi square tests. The LIWC percentages for POV and CR groups were compared using independent samples *t*-tests. In addition to the SP ratings described above, a cumulative communication score was achieved for each student by summing all communication items, and a cumulative case score was

calculated that reflected students' total OSCE performance across all three stations. With the exception of this latter score, analyses of SP ratings refer to the chest pain station only. SP data from both groups were compared using 2-tailed t-tests. All statistical analyses were performed using SPSS (SPSS, 2003). Because of the exploratory nature of this study, in all analyses, alpha was set at $p < 0.10$, and we did not adjust the criterion for statistical significance for multiple comparisons.

Results

Thematic Codes

The POV group's essays were significantly more likely than those of the CR group to adopt the first person point of view, show empathy for the doctor, and receive a higher overall empathy and insight rating (see Table 2). The POV group also showed a trend toward greater awareness of physician feelings when compared to the CR group. Students in the CR group tended to blame the patient for his condition more often than students in the POV group, and to refer more often to preventive steps that could have been taken by the patient.

LIWC Scores

The POV group was significantly more likely than the CR group to use the pronoun "I" (see Table 3). POV students also used significantly more words of emotion than the CR group, and showed a tendency toward using more negative emotion words, as well as words expressing anger. The POV group was more likely to make religious and spiritual references (i.e., use language pertaining to religion, God, or faith), and showed a trend toward questioning whether the resuscitation efforts in the poem should be viewed in achievement-oriented terms. The CR group was significantly more likely to use more words per sentence and longer words. They were also more likely to invoke analogies of sports and competition in reference to the ER scenario (e.g., they used metaphors such as wanting to "hit a home run" by saving the patient; framed the ER situation as a competitive game between the medical team and death; and defined the object of the resuscitation efforts in terms of winning or losing).

SP Ratings

There were no significant differences between the CR and the POV groups in terms of SP ratings.

Discussion

In terms of thematic codes, there were no differences between students in the POV and CR groups regarding either clinical reasoning or empathy for patient

Table 2.[1] Comparison of writing samples from medical students trained in either point-of-view writing or clinical reasoning on presence or absence of 11 thematic categories

Writing sample variable	% that received "Yes" writing sample score		χ^2	p
	Clinical Reasoning Group ($n = 45$)	Point-of-View group ($n = 47$)		
Point of view	73.3%	91.5%	5.275	0.022
Empathy for doctor	77.8	95.7	6.543	0.011
Feelings of doctor	88.1	97.8	3.272	0.070
Empathy for patient	48.9	57.4	0.676	0.411
Empathy for family	24.4	25.5	0.014	0.904
Meaning	28.9	29.8	0.009	0.925
Blame of patient	17.8	6.4	2.836	0.092
Battle against death	22.2	25.5	0.138	0.710
Prevention	15.6	4.3	3.326	0.068
Limits of intervention	17.8	25.5	0.812	0.367
Clinical reasoning	22.2	14.9	0.820	0.365
Overall score*	53.3	74.5	4.464	0.035

*Recoded score from a 4-point global rating item, where "Low" = global rating of 1 or 2, and "High" = global rating of 3 or 4.

or family, findings which suggest that both groups developed similar skills in these fundamental areas. However, in other areas, group differences did emerge. First, only approximately 70% of CR students employed the first person voice in writing, compared to about 90% of the POV students. This is an interesting result because first-person writing is considered to be a way of moving emotionally closer to the "other" (Charon, 2001). The POV students were also able to express more empathy for the physician and to describe more of the physician's feelings than were the CR students. Finally, the essays written by POV students were better at expressing empathy and insight. The CR

[1]We also tested the effects of the demographic variables of age, gender, ethnicity, and specialty choice on Table 2 dependent variables. Overall, no significant differences were found, with the following exceptions. Older students tended to identify Meaning more often than did younger students ($r = 0.20$; $p = 0.054$). This variable referred to whether student essays considered possible meanings or significance for the narrator-physician of the event portrayed. Males (34.0%) tended to endorse Limitations of Medicine more often than females (14.3%; $p = 0.052$). This category implied that there is only so much doctors can do about lifestyle diseases such as CAD. Asian (33.3%) and "other" students (36.4%) tended to identify the medical encounter as a Battle against Death more often than did white students (13.01%; $p = 0.051$). Finally, Asian students (100.0%) showed a trend to express Empathy for the Doctor more often than did both "others" (86.4%) and whites (80.4%; $p = 0.07$). There were no statistically significant associations for specialty and any of these dependent variables. These results suggest that further research might usefully investigate age, gender, and ethnicity variables in relation to students' ability to respond with insight and empathy to a clinical prompt.

Table 3.[2] Differences in writing samples of medical students trained in either point of view writing or clinical reasoning on Linguistic Inquiry Word Count variables

LIWC variable	Group (CR/POV)	*n*	Mean	SD	*t*	*p*
Words/sentence	CR	45	19.79	9.67	2.92	0.005
	POV	47	14.98	5.50		
6-letter words	CR	45	15.20	4.92	3.00	0.004
	POV	47	12.44	3.88		
Pronouns	CR	45	14.94	4.13	− 2.43	0.017
	POV	47	17.02	4.12		
Self	CR	45	7.47	3.16	− 2.27	0.025
	POV	47	8.89	2.83		
Emotion	CR	45	4.75	1.73	− 2.26	0.026
	POV	47	5.60	1.85		
Negative emotion	CR	45	2.67	1.49	− 1.81	0.074
	POV	47	3.29	1.76		
Anger	CR	45	0.664	0.951	− 1.68	0.096
	POV	47	1.00	0.976		
Achievement	CR	45	1.38	1.00	− 1.79	0.076
	POV	47	1.90	1.69		
Sports references	CR	45	0.180	0.376	2.04	0.045
	POV	47	0.049	0.213		
Religious references	CR	45	0.062	0.208	− 2.42	0.028
	POV	47	0.232	0.473		

students showed a trend toward blaming the patient and retrospectively suggesting ways he could have prevented his heart attack.

The LIWC word counts indicated that POV students expressed more feelings than the CR group, as well as a tendency to express more negative feelings, including anger. In addition, POV students were more likely to make references to the spiritual and religious implications of the ER scenario, and to question whether it should be evaluated only according to achievement-oriented criteria. The CR group used more complex sentences and bigger, more

[2]We also tested the effects of the demographic variables of age, gender, ethnicity, and specialty choice on Table 3 dependent variables. Overall, no significant differences were found, with the following exceptions. Males had higher Emotion mean scores (2.48) than females (1.82; $p = 0.030$), meaning that male students used more emotional words in their essay than did female students, perhaps a counterintuitive finding. ''Other'' students had higher Pronoun mean scores (18.01) and higher Self mean scores (9.46) than whites (respectively, 15.06; $p = 0.024$; and 7.39; $p = 0.021$), meaning that they referred more frequently to both the physician-narrator and to the other ''characters'' portrayed in the prose poem. ''Other'' students also had higher Anger mean scores (1.22) than whites (0.58; $p = 0.029$). There were no statistically significant differences for age or specialty choice. These results suggest that further research might usefully investigate gender and ethnicity variables in relation to students' ability to empathically identify with a clinical prompt.

technical words. They also were more likely to use sports metaphors to describe the ER event.

Considering the SP data, we found that the SPs did not systematically distinguish between the two groups. In other words, they did not find the students trained in either method as systematically more professional, having better communication skills, or performing better overall across all OSCE stations. Neither were they more satisfied with students trained in one group versus the other group.

These findings present something of a paradox. The writing intervention was successful in the sense of developing more first person perspective, empathy, identification of feelings, expression of affect, acknowledgment of the spiritual, and insight, at least as expressed in student writing. However, SPs did not value these students more highly. Since there was no debriefing of SPs, it is hard to know how to interpret this discrepancy. However, several explanations are possible.

First, empathic skills developed through writing may not translate into behavior, so that POV students may have needed more clinically-relevant training to effectively express the positive qualities detected in their writing. Alternatively, these qualities may in fact have been incorporated into student behavior, but in a case-specific manner (Prislin *et al*., 2001). In other words, students may not have perceived an apparently well and busy man with a few chest pains as requiring much empathy.

Finally, at this early stage of training, pre-clinical students who are just beginning through POV writing exposure to recognize and express emotions, adopt the perspective of another, acknowledge anxiety, fear, and doubt, and be sensitive to the spiritual ramifications of life-and-death situations, may appear too tentative, too ''unprofessional'' in an SP encounter (Shapiro & Lie, 2004). This may be especially likely because, although well-trained, SPs do not have the same emotional identification with the disease they portray as do real patients. Therefore, they may minimize the importance of empathy and feeling while elevating technical competence. If substantiated, these findings may have important implications for the interpretation of standardized patient evaluations and at the least raise questions about what aspects of a doctor-patient encounter can be adequately measured through these primarily checklist-driven exams.

Study Limitations

There were several sources of potential confound in this study. Cross-contamination between the two groups was likely considerable. Since students from both conditions were part of the same class, they participated in other courses together, intermingled freely, and could easily have swapped information or anecdotes about their respective small group experiences. Also, as part of the course itself, both groups were exposed to instruction in clinical reasoning, and both had the opportunity to read the supplemental

literary accounts of illness. Further, although we did not detect any systematic bias in terms of the faculty teams facilitating the POV and the CR groups, it is possible that differences did exist among these facilitators which were not measured (e.g., the way in which they provided feedback to students on their monthly essays). We also had no way of controlling for other potential confounding variables such as experiences outside the formal educational environment which might have systematically influenced the direction of our results.

Because our sample consisted of pre-clinical students, it is quite possible that more experienced students would have different responses to the clinical situation described in the prose poem; and would behave differently in similar OSCE situations. A related point is that we did not assess the fidelity of our measures in a real clinical setting, as opposed to a test environment. In addition, the significant findings achieved applied only to written expression, and did not translate into clinical behaviors, at least as evaluated by SPs. Finally, the relatively small sample size, the number of statistical tests performed, and the failure of many of our results to achieve a $p < 0.01$ level of significance mean that our conclusions are suggestive rather than definitive.

Despite these limitations, we may conclude that training in point-of-view writing was effective in increasing the ability of students to adopt another's point of view, develop empathy for another, accurately identify the feelings of another, express emotion, including negative emotion, demonstrate insight, question an achievement-oriented approach to patient care, and consider spiritual aspects of serious illness. Much work remains to be done, including investigating the possibility that standardized patients devalue empathy and emotion in clinical encounters because of a relative lack of emotional cathexis toward their pseudo-condition. Most importantly, further research must assess whether the increased empathy, sensitivity, spirituality, and insight achieved in medical students by point-of-view training can translate into actual clinical attitudes and behaviors toward real patients. Such research must study students during their clinical years, when patient contact increases exponentially, and must include patient as well as student outcome measures.

References

BAERNSTEIN, A. & FRYER-EDWARDS, K. (2003). Promoting reflection on professionalism: a comparison trial of educational interventions for medical students. *Academic Medicine*, *78*, 742–747.

BLASCO, P.G., MORETO, G. & LEVITES, M.R. (2005). Teaching humanities through opera: leading medical students to reflective attitudes. *Family Medicine*, *76*, 18–20.

BRANCH, W.T., POLOLI, L., FRANKEL, R.M., COULEHAN, J.L. & WILLIAMS, P.C. (2001). Small-group teaching emphasizing reflection can positively influence medical students' values. *Academic Medicine*, *76*, 1171–1172.

CHARON, R. (2000). Reading, writing, and doctoring: literature and medicine. *American Journal of Medical Science*, *319*, 285–291.

CHARON, R. (2001). The patient-physician relationship: Narrative medicine: a model for empathy, reflection, profession, and trust. *JAMA*, *286*, 1897–1902.

DASGUPTA, S. & CHARON, R. (2004). Personal illness narratives: using reflective writing to teach empathy. *Academic Medicine*, *79*, 351–356.

HATEM, D. & FERRARA, E. (2001). Becoming a doctor: fostering humane caregivers through creative writing. *Patient Education & Counseling*, *45*, 13–22.

HENDERSON, S.W. (2002). Medical student elegies: the poetics of caring. *Journal of Medical Humanities*, *23*, 119–132.

MANDIN, H., JONES, A., WOLOSCHUK, W. & HARASYM, P. (1997). Helping students learn to think like experts when solving clnical problems. *Academic Medicine*, *72*, 173–179.

PENNEBAKER, J.W., FRANCIS, M.E. & BOOTH, R.G. (2001). *Linguistic inquiry and word count.* Mahwah, NJ: Erlbaum Publishers.

PENNEBAKER, J.W. & SEAGAL, J.D. (1999). Forming a story: the health benefits of narrative. *Journal of Clinical Psychology*, *55*, 1243–1254.

PRISLIN, M.D., LIE, D., SHAPIRO, J., BOKER, J. & RADECKI, S. (2001). Using standardized patients to assess medical student professionalism. *Academic Medicine*, *76*, S90–S92.

RIVERA, R., BORASKY, D., RICE, R. & CARAYON, F. (2005). Many worlds, one ethic: design and development of a global research ethics training curriculum. *Developing World Bioethics*, *5*, 169–175.

RUCKER, L. & SHAPIRO, J. (2003). Becoming a physician: students' creative projects in a third-year IM Clerkship. *Academic Medicine*, *78*, 391–397.

SHAPIRO, J. & LIE, D. (2004). A comparison of medical students' written expressions of emotion and coping and standardized patients' ratings of student professionalism and communication skills. *Medical Teacher*, *26*, 733–735.

SMYTH, J.M., STONE, A.A., HUREWITZ, A. & KAELL, A. (1999). Effects of writing about stressful experiences on symptom reduction in patients with asthma or rheumatoid arthritis. *JAMA*, *28*, 1304–1309.

SPSS (2003). *SPSS version 12.0.* Chicago, IL: SPSS Inc.

STONE, J. (1985). ''The Hands.'' In *Renaming the streets* (pp. 10–11). Baton Rouge, LA: Louisiana State University Press.