

# The impact of prompted narrative writing during internship on reflective practice: a qualitative study

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**Abstract** Narrative writing has been used to promote reflection and increased self-awareness among physicians. The purpose of this study was to determine the impact of prompted narrative writing on reflection. Thirty-two interns at 9 internal medicine residency programs participated in a year-long qualitative study about personal growth beginning in July of 2002. Interns wrote narratives every 8 weeks. At study completion, interns wrote a final narrative describing the affect that being in the study had on them. Responses were reviewed and organized into domains. Writing throughout the year resulted in reflection and encouraged interns to reconsider their core values and priorities. Some found that the exercise promoted greater self-awareness and provided an emotional outlet. Writing about difficult experiences coupled with reflection motivated some interns to want to improve. Prompted narrative writing led to reflection among interns and promoted self-awareness. Educators may consider incorporating narrative writing into residency education.

**Keywords** Graduate medical education · Qualitative research methods · Reflective writing

## Introduction

Reflective practice in which an individual thinks critically about a thought, experience, or action represents a means to increased self-awareness and professional competence (Epstein and Hundert 2002). A physician's understanding of their own feelings, values, prejudices, and methods of relating, influences how they react to patients and the clinical decisions they make (Epstein 1999; Novack et al. 1997; Longhurst 1988; Meier et al.

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2001). Greater self-awareness may enable physicians to practice medicine more effectively, manage stress in a healthier manner, foster more therapeutic relationships with their patients, and find deeper meaning in their work (Horowitz et al. 2003; Novack et al. 1999; Branch et al. 2001). Reflective practice also has implications for the development of professional competence. As physicians gain in experience they often act on tacit knowledge (intuition, pattern recognition) (Epstein and Hundert 2002), however relying on tacit knowledge alone may lead them to ignore data or outcomes that do not fit within some pre-existing framework (Schon 1983). Medical errors or missed opportunities to address a patient's true concern may result. Reflective practice creates a more dynamic framework for the acquisition and application of knowledge in new contexts (Mamede and Schmidt 2004; Boud 1985; Schon 1983).

Residency training is a stressful period during which physicians-in-training are faced with complex and powerful situations. Residency training may be particularly amenable to reflective learning. Writing about one's reflections on powerful events encourages exploration of one's emotions and reactions related to that particular experience. This type of reflective practice allows for a deeper, more critical observation of oneself (Bolton 2001). Medical schools, residency training programs, and professional organizations have developed curricula, educational strategies, and workshops using narrative writing to foster reflection and personal awareness among students and physicians (Brady et al. 2002; Rabow and McPhee 2001; Kern et al. 2001; Bolton 2001; Charon 2001a; Gaver et al. 2005; DasGupta and Charon 2004). Evaluations of these interventions have focused primarily on the content of participants' writings and not on the process of writing. Furthermore, little is known about the reflective practices of resident physicians, the factors promote or inhibit reflection, and the best methods for encouraging reflective practice. In this study, we sought to understand if prompted narrative writing led to increased reflection by the study participants, and what impact this had on participants' attitudes and behaviors.

## Methods

### Study design

We conducted a prospective qualitative study to explore processes and outcomes of personal growth among internal medicine residents. Personal growth involves being conscious of one's thoughts, feelings, prejudices and judgments and using this personal knowledge to act with mindfulness and in greater accordance with one's values and potential (Ryff and Singer 1996). Based on prior work in this area, we developed a framework for understanding personal growth among physicians-in-training (Kern et al. 2001; Levine et al. 2006; Wright et al. 2006). In this model, reflection serves as a facilitator for personal growth, particularly when it occurs in the setting of a powerful experience that evokes strong emotions in the intern (such as witnessing unethical behavior toward a patient or caring for a dying patient).

For this study, interns wrote narratives in response to questions and prompts related to personal growth themes every 8 weeks throughout the course of the year. The study was conducted by email correspondence. In order to assess the impact of prompted narrative writing on reflection, at the end of the study interns were asked to respond to the following statement:

Describe how being involved in this study may have influenced any experiences that you had this past year, in terms of your attitudes or behaviors towards yourself, your work, patients, colleagues, friends or loved ones.

### Study participants

Interns at nine internal medicine residency programs in California, Georgia, Maryland, Massachusetts, Missouri, Pennsylvania, New York, Texas, and West Virginia were invited to join the study in July of 2002. We selected programs based on the investigators' personal contacts and to ensure diversity of programs by size and region. Involvement was voluntary and interns understood that all responses would be confidential. Our goal was to recruit a convenience sample of 3–4 interns per program. The first 3–4 interns to volunteer were consented to participate. In appreciation for their involvement, interns were sent a holiday card and Blockbuster's gift certificate halfway through the study. The Institutional Review Boards at the participating institutions approved the study.

### Data collection

In July of 2002, participants signed consent forms and completed a baseline survey. The survey introduced the participants to the study, collected demographic information and interns wrote their first narrative related to personal growth. The following definition of personal growth was provided: "Personal growth is defined as any process by which an individual gains in awareness or understanding of themselves (personal awareness), and as a result, experiences changes in their feelings, beliefs, attitudes, behaviors, or views of themselves in a direction of increased congruency and accuracy with their goals and values." Interns then received an email approximately every 8 weeks throughout the year asking them to respond to a question or comment related to physician self-awareness, personal growth, and well-being. The study questions were developed through review of the literature, (Epstein 1999; Novack et al. 1997; Longhurst 1988; Novack et al. 1999; Kern et al. 2001) reading of the interns' narratives as they were collected (Miller and Crabtree 1992), and from discussions among the study team (Table 1). No other instructions about the writing process were provided to participants. Interns who did not respond initially to each prompt, received up to 3 reminder emails encouraging them to respond.

A single researcher received all emails and removed any personal identifiers. All responses were collated into a single "master document" in preparation for analysis and interpretation.

### Data analysis and interpretation

For this study we performed a qualitative analysis of the content of interns' responses to the final emailed prompt, specifically we used an "editing analysis style". In this method, "the researcher searches for meaningful units or segments of text that both stand on their own and relate to the purpose of the study" (Miller and Crabtree 1992). Two researchers (RL and SW) independently read the master document to identify meaningful segments of

**Table 1** Prompts used to encourage reflective writing

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Baseline Survey July 2002 (distributed in paper format)

Prompt for first narrative

Internship involves a significant increase in expectations and responsibilities and may be the most physically and emotionally demanding year of residency. Please write a short paragraph describing what you think will be the most important and challenging aspects of internship. Comment on how you think you might be personally affected by these.

E-mail Prompts

August 2002

Several attributes are felt to be important to becoming a physician such as, integrity, compassion and a sense of humanity. Choose one or two attributes that are important for you and which you believe are connected with the process of becoming a physician. Describe an experience that has made this connection more significant for you.

October 2002

Please identify two or three major stresses that you have experienced since the beginning of internship. Describe some methods or ways that you use to cope with stress.

December 2002

Describe one important relationship in your life. What is it about that relationship that makes it important to you? Describe the affect of internship on that relationship. Describe methods for dealing with stresses on that relationship.

February 2003

Choose two or three words that describe how you are feeling about yourself as a physician at this time. Describe an experience or situation that you think may have led you to feel this way.

April 2003

Identify a negative or disappointing clinical or work-related experience (such as a medical mistake, critically ill or dying patient, professional conflict or negative feedback on your performance) that has occurred during internship. What was your reaction to this experience? Did any positive changes occur from this experience? If yes, describe them.

June 2003

Describe a time in your clinical work when you felt that your core values were threatened (i.e. unethical behavior by another healthcare provider, medical student or resident abuse). How did this make you feel? What did you do?

Describe how being involved in this study may have influenced any experiences that you have had this past year, in terms of your attitudes or behaviors towards yourself, your work, patients, colleagues, friends or loved ones.

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text. We sought to determine if participation in this study led to increased reflection. Reflection is defined as the process of thinking explicitly about a thought, experience or action (Bolton 2001). Therefore, we identified evidence of increased reflection as segments of text, which described explicit awareness of ones' thinking. The two researchers reviewed the coding to agree on which segments demonstrated evidence of an awareness of reflection. We were also interested in any other impacts of prompted writing or reflection on the participants. Domains emerged from the data and were reviewed and revised using an iterative process (Lincoln and Guba 1985). The naming of domains and the decision about which quotations to present in the manuscript were made through consensus by the initial researchers and confirmed by the larger study team. For respondent validation our analysis of the writings was shared with the participants and none disagreed with our interpretation.

## Results

### Response rate and characteristics of respondents

Thirty-two interns agreed to participate in the study. The total number of interns at participating programs was 300 (range 8–62). One participant withdrew from internship after the second email contact and therefore became ineligible to participate in the study. In total there were 184 outgoing email contacts, including the final question about participation in the study, and 169 responses for an overall response rate of 92%. Over 90 pages of written comments were collected over the year. Twenty-four interns (77%) responded to the final question.

The mean age of respondents was 29 years with a range of 25–37 years. Forty-four percent were male, 47% identified themselves as non-white, including 19% under-represented minorities (African-American, Hispanic, Native-American). Seventy-two percent of participants were born in the US. Almost half (44%) were married and 22% had children. Two of the nine programs were community-based. Five were designated university affiliated and two were community-based/university affiliated training programs. The programs had wide geographic representation with one each from New England, the Southwest, Midwest and West regions. Three were from the mid-Atlantic region and two from the South.

### Outcomes related to writing narratives

Twenty of the 24 interns who responded to the final question had positive comments about their involvement in the study. Four interns stated that being involved in the study had no impact on them. Analysis identified five domains related to how interns viewed the experience of writing narratives throughout the year (Table 2).

#### *Prompted deeper reflection*

This domain developed out of comments that focused on how writing prompted interns to take time to think more deeply about events that had occurred during the year, as well as their feelings, attitudes, and reactions. Nineteen of the 20 interns with positive comments reported that being involved in the study led to deeper reflection about their experiences during the year. The twentieth intern commented on the therapeutic aspects of writing but did not mention deeper thinking or reflection.

One intern noted:

**Table 2** Outcomes related to writing narratives and frequency with which they were cited

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Prompted deeper reflection (19/20)
Enhanced self-awareness and emotional healing (7/20)
Motivation to improve (4/20)
Increased awareness of progress over time (3/20)
Evaluation of priorities and values (3/20)

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It certainly has forced me to think more about how I have felt during internship and how things have affected me rather than simply continuing to work in a robotic manner.

Two other interns described the importance of having time to reflect this way:

It has given me the chance to reflect on my year periodically. It is easy to become lost in the hustle and bustle, the long hours and the calls during intern year.

This study allowed me to... be an observer of myself this last year. In fact, a lot of the negative and positive ways that I've felt this last year are easier to remember since I've had to recall them over the months. I've become a fan/rooter for myself by the end... (like it's a sporting event)!

Writing throughout the year helped interns to keep track of meaningful events and provided them with a personal timeline for the year. One intern described the experience this way:

I think writing answers to some of these questions has allowed me to reflect back on the year and think about specific important topics that I might not have thought about again.

#### *Enhanced self-awareness and emotional healing*

Responding to the study emails encouraged interns to become more aware of their own feelings and how their actions affected those around them. For some, this resulted in changes in their behaviors. These interns describe experiencing increased personal awareness in this way:

The questions in this study do make me stop and think about things-how I feel about what I'm doing in residency. In turn, I might be more apt to stop and think about how/what I'm doing in residency makes my friends/family/fiance feel.

I certainly have become more reflective while writing my responses and I think more cognizant of what those close to me were going through. It forced me to think about my actions, my views, my overall impressions of my experience in a way I may not have otherwise done.

Being part of this study has made me stop and reflect...which has made me more open to other's ideas and thoughts

For some interns writing provided an emotional release:

It is always good to pause to reflect on my experiences. The most cathartic question was a few months back when I got to describe my really bad experience.

The act of writing itself was viewed as a method for managing stress. An intern wrote:

Just being able to write what I'm thinking is therapeutic. I spend all day asking people to tell me how they feel... it's nice to have someone ask me once in awhile.

### *Motivation to improve*

Interns reported that writing about their experiences during the year motivated them to improve both professionally and personally. The following examples illustrate this:

I feel that it [participation in the study] has been a positive experience by motivating me to improve on my clinical, communication skills, and also my relationships with colleagues, patients, family and friends.

Another intern wrote:

This provided opportunity for me to reflect ...and focus on improving myself as an intern.

A third intern made this comment:

...writing initiated me to think about my experiences and therefore correct my approach and develop a healthy attitude...

### *Increased awareness of progress over time*

Interns believed that writing narratives provided them with greater insight into their progress over the year. This sentiment is illustrated in the following quotations:

Participation in this study made me more cognizant of my progress as a clinician throughout this year. With each email I filled out, I was able to reflect on my recent experiences and assess how I handle things differently now, compared to 3 months ago.

This study has helped me to appreciate the various types of “progress” I’ve made during the last year.

### *Evaluation of priorities and values*

Writing encouraged the interns to focus on their core values and goals. One intern explained how writing had this effect:

The questions in this study were gentle reminders to me to keep things in perspective. By answering the questions I was able to remind myself of my priorities, reasons for doing what I’m doing, and primary beliefs and values that I stand for.

Another intern recounted that the process served to remind him why he had originally entered medicine.

It has given me the chance to reflect ... It is very easy to lose insight into the real reason why we went into this in the first place.

## **Discussion**

Prior studies using narrative techniques for teaching medical students and residents have occurred in the setting of periodic seminars or longitudinal courses where participants are

given protected time to reflect and write. The evaluation of these interventions have focused primarily on the content of participants writings as opposed to the experience of writing itself (Brady et al. 2002; Gaver et al. 2005; DasGupta and Charon 2004). Our study is unique in that we focused on the internship year, a period of training that is extremely busy and often stressful for young doctors, we utilized an intervention which required minimal time, preparation and faculty involvement but that relied on the interns to commit their own time to participate. Our evaluation focused on the impact of prompted writing in addition to the content of the interns' narratives.

We found that prompted narrative writing was almost uniformly successful in promoting reflection. Writing about their experiences on a regular basis reminded interns to stop and think about how they were feeling and acting during the year. Setting aside time to reflect was a critical feature and participating in this study encouraged interns to do this routinely throughout the year. Interns described how writing narratives led to a greater understanding of themselves, an examination of their core values and priorities, and motivation to improve.

Reflection involves thinking explicitly about a thought, experience, or action and has profound implications for medical education (Bolton 2001). Reflective learning begins with practice, wherein the learner experiences firsthand the complexities of the topic to be mastered. With further reflection, experience becomes knowledge that may be applied to a specific situation, as well as generalized to others. Reflection helps to integrate newly acquired knowledge into existing frameworks of understanding. Key to completing this cycle of learning is "action", when one applies new knowledge to a different scenario (Rolfe 2002; Schon 1983; Kolb 1984; Branch and Paranjape 2002; Boud et al. 2000). The nature of residency training lends itself well to reflective practice where residents are regularly immersed in complex situations and must be aware of the medical details of a specific case, their own biases and feelings, and the impact of the illness on the patient. One study found that reflective practice was more common among younger physicians and during training (Mamede and Schmidt 2005).

Despite this theoretical link between reflective practice and physician learning and well being, little is known about how physicians employ reflective practice. Mamede and Schmidt surveyed practicing physicians about their thinking in relation to specific aspects of patient care. They describe a multidimensional structure of physician reflective practice (2004). The key components include: deliberate induction, deliberate deduction, testing hypotheses against the problem at hand, an attitude of openness towards reflection, and meta-reasoning. We found evidence of three out of five of these components in the responses of participants in our study. First, deliberate induction refers to an explicit attempt to think critically about a previously unknown experience or problem. Interns stated that writing made them more aware and cognizant of the situations around them. Second, because the overwhelming response to writing and reflection was positive, this demonstrates an openness to reflection on the part of participants. Finally, meta-reasoning refers to using reflection to review ones' assumptions or beliefs. We believe this corresponds to our theme of enhanced self-awareness.

Reflection and self-awareness are intimately related and vital to the personal and professional development of physicians. In particular, Novack reasons that physicians "use themselves as instruments of diagnosis and therapy" and therefore personal awareness is critical to providing compassionate and patient centered-care, by providing physicians with insight and understanding into how and why they react to a specific experience (Novack et al. 1997).



Educators have suggested various methods for fostering reflection among medical trainees, including the use of narrative writing (Brady et al. 2002; Charon 2001a; Branch and Suchman 1990; Macloud 2001). Our study suggests that interns may be encouraged to take time to reflect using very simple measures such as emailed prompts and that narrative writing encourages reflection and leads to increased self-awareness. In various forms, narrative writing has been put forward as both a therapeutic tool and a model of practice for physicians (Bolton 2001; Charon 2001a, b; Scannell 2002). Studies have demonstrated the positive influence on health and well-being that results from writing about one's own experiences (Pennebaker 2000). Charon argues that narrative competence is critical to the practice of medicine. The ability to be truly present, hear, acknowledge, comprehend, synthesize and be engaged in a patient's story exemplifies narrative competence. Narrative writing as it encourages reflection, self-awareness, and empathy is a practical means to achieve this competence (Charon 2001a).

While reflective practice has been embraced as a method to enhance learning, develop expertise, and promote physician self-care, ethical issues related to reflective writing deserve further consideration. Such issues are most pronounced when reflective writing is a required component of learning, and perhaps even subject to evaluation. Should all learners be required to write down and share their reflections or does there need to be an opt-out for those who are uncomfortable with participation? Concerns about safety and confidentiality will be paramount for select learners. In this study the four participants that reported that being involved in the study had no impact on them may have participated on a more superficial level because of apprehensions related to analysis of their writings or privacy (Ghaye 2007).

As physicians we have ethical obligations to our patients, our learners, and ourselves, at various times reflective writing may set these against one another (Charon 2001b). For example, when is a patient's experience enough of our own to write about and possibly share with others? How much of our reflective practice should we disclose to our patients, colleagues or learners? Further, is it fair to ask learners to engage in reflective practice that is subject to evaluation, when our own introspections are not available for scrutiny?

Our study has several limitations. First, despite the fact that our study included interns from nine different residency programs from most regions of the country, one should be careful in generalizing the findings to other medical trainees. Second, involvement in this study was voluntary and our participants or their training programs may have been unique in some way that we could not identify but that resulted in increased reflection. We did not include a control group and cannot know if interns who did not participate experienced similar levels of reflection during the year. Finally, our findings relied on subjective comments from interns rather than objective measures of reflection and increased self-awareness.

These limitations notwithstanding, our prospective study included interns from multiple training programs, obtained high response rates and analyzed data collected at the end of a year long study employing prompted narrative writing. We utilized two reviewers to perform the content analysis and solicited feedback from both our study team and study participants on the findings to increase validity.

This study adds empirical support for the value of encouraging resident reflection through prompted narrative writing. Educators interested in promoting reflection, and greater self-awareness among their trainees may wish to consider incorporating this technique into their residency training programs. Further research is needed to determine whether reflective writing leads to professional competence and well-being and what the guidelines for ethical reflective writing should be.

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