ORIGINAL RESEARCH

The Value of Patient Narratives in the Assessment of Older Patients Presenting with Falls

Carolyn Wong, BSc[1], David B. Hogan MD, FACP, FRCPC[2]

[1]Faculty of Medicine, University of Calgary; [2]Division of Geriatric Medicine, Faculty of Medicine, University of Calgary, Calgary AB

DOI:http://dx.doi.org/10.5770/cgj.16.55

ABSTRACT

Background & Purpose

Falls are a common and serious health problem experienced by older persons. The perception and interpretation of the fall experience can influence the long-term consequences of the event. In this pilot study, we explored whether there would be additional value in obtaining a patient narrative as part of the assessment of an older person who had fallen.

Methods

We conducted narrative interviews on a convenience sample of five older patients referred to the Calgary Fall Prevention Clinic (CFPC). Phenomena from the narratives were generated using original audio recordings. A focus group of four CFPC health professionals discussed similarities and differences between the narratives and the CFPC assessments conducted on these subjects without access to the narratives.

Results

Patient narratives revealed additional information about the person's emotional response to their falls and overall health status, their strengths that could be utilized in implementing a care plan, and what they had done personally to prevent further falls.

Conclusions

Including patient narratives within standard fall-risk assessments could aid in understanding the emotional impact of falls on older patients and how they might respond to interventions. A challenge would be incorporating this within the time restraints of routine clinical practice.

Key words: patient narratives, older persons, falls

INTRODUCTION

Illness is at its heart subjective, being fully experienced by the ill person alone. A competent and caring physician cannot simply treat disease without considering the individual and their perceptions, understanding, and responses to their condition. Evidence-based medicine should only be used while keeping the patient's unique context in mind.(1) There has been increasing interest in exploring the utility of patient narratives for both practice and research.(1-5) The analysis of narratives regarding an experienced illness or condition gives valuable and complementary information pertaining to the patient.(1) Stanbrook *et al*.(6) argue that suboptimal adherence to therapy is partly the result of physicians' failure to help patients understand their disease and its treatment. Narratives should not to be utilized to the exclusion of standard methods of clinical investigations, but are a valuable tool for developing and promoting patient-centred clinical care.(4,6) By appreciating the experience of failing health in individual patients, physicians and other health-care providers will hopefully be able to practice both more humanely and effectively.

We chose to investigate the utility of patient narratives in the practice of geriatrics by focusing on falls, which are a common and serious medical problem encountered by older persons. Nearly one in ten older adults will report having fallen within the past three months,(7) and they frequently are associated with injuries.(8) An estimated 5%–25% of those who fall will experience a major injury such as fracture, while approximately 50% sustain a minor injury.(9) Dealing with falls and their consequences is expensive. In 2008, $96 million was spent in Alberta on hospitalizations for older adults who had suffered a fall-related injury.(8)

Because a history of falls is a strong predictor of future falls,(10) comprehensive assessment designed to identify and, when possible, deal with modifiable fall risk factors in seniors who have fallen is commonly recommended. This approach has not been shown to be effective in all studies.(11) Ensuring adherence on the part of the patient to their tailored

management plan is a challenging yet critical component of this intervention.

The aim of our pilot study was to determine whether there might be additional value in obtaining a patient's narrative as part of the assessment of an older patient who has fallen. That is, in terms of the management and rehabilitation of these patients, can useful information that might be currently missed be obtained by using narratives? In our study we analyzed the narratives provided by patients of their lives before and immediately after falling, looking for residual effects of falls on their lives and how they have coped. We then compared our analysis of the narrative with the standard assessments performed by an ambulatory fall prevention team in order to highlight commonalities and identify where gaps might exist in the standard assessment. Finally, with the team we explored whether they felt this information might improve the service provided to their clientele.

METHODS

This was a pilot study. The information obtained will be used to plan future research on the utility of narratives for this patient population. As such, we deliberately chose to work with a small sample size. For a pilot study, we felt a series of five interviews would provide a sufficient sample to explore the potential utility of patient narratives in this population.

Recruitment

A convenience sample of five subjects was recruited from the pool of patients referred to the Calgary Fall Prevention Clinic (CFPC) at the Bridgeland Seniors Health Centre in Calgary, Alberta. Patients referred to the CFPC had to be at least 65 years of age and had to have fallen within six months of the referral date. Referred patients were approached by a member of the Fall Prevention team regarding their potential interest in this study at the time of their initial assessment. Those who expressed an interest in the study gave permission for their name and contact information to be provided to the researchers. They were then contacted by one of the authors (CW) and, if agreeable, an in-home interview was scheduled. Subjects were required to speak English fluently and have the capacity to both consent to the study and provide a narrative. (Note: all potential subjects who were approached had a Mini-Mental State Examination [MMSE] score of at least 21; a MMSE is routinely done during the initial assessment of a patient seen by the CFPC.)

Ethics

After being fully informed about the study, subjects were asked to sign a consent form before being interviewed. With the permission of consenting research subjects, copies of the CFPC consultation letters for each subject were obtained after all identifying information (e.g., name, Alberta Health Care Number, address) other than their unique study number was removed. The same unique study number was used for the CFPC consultation letters, audio-recorded interviews, and typed transcripts to allow data linkages. Audio-recordings (made with the subjects' permission) were kept in password-protected files, with access restricted to the two members of the research team. Ethics approval for the study was obtained from the University of Calgary Conjoint Health Research Ethics Board.

Data Collection

Interviewing began in late December 2011 and was completed by the end of February 2012. A member of the research team (CW) met with subjects in their place of residence for a single interview lasting approximately 30–60 minutes. The four-phase Narrative Interview method outlined by Jovchelovitch and Bauer[12] was used to minimize interviewer impact on the subjects' spontaneously generated narrative. During the first phase, the initial central topic is introduced to the subject, stating the purpose of the study and focusing the topic of the narrative to follow. For example, "We'd like to know what things were like before and immediately after your fall, and how the fall affected you." The second phase consists of the main narrative. The subject is allowed to speak without interruption, followed by probing for further information once the narrative appears to have come to a close. The third phase of questioning is meant to elicit new information regarding the events mentioned in the main narrative, though inquiries into attitudes or opinions are avoided. The final phase involves concluding the interview. The audio-recording is stopped and small talk takes place. Here, the interviewer is able to evaluate rapport with the subject, and to probe into attitudes or opinions that might aid with the interpretation of the narrative. Notes on this fourth phase are made immediately following the conclusion of the interview.

The consultation letters for each subject were obtained following the interviews and the analyses of the narrative transcripts.

Data Analysis

Post-narrative impressions and field notes were typed and audio-recorded immediately following completion of the interview. They were used to assist in interpreting the narratives. The full narrative recordings were transcribed with elimination of identifying information of the research subject and any persons mentioned by the narrator. Each narrative underwent two separate coding analyses for themes and patterns[13,14] as performed by the authors (CW and DB). Neither author was directly involved in the original CFPC assessments nor had any personal interactions with subjects beyond the context of this study. Categories and phenomena were derived from initial intrathematic analysis of individual

narratives,[5] and were determined through several readings of the transcript, using the original audio recordings of the interview and field notes to help provide context. The research team discussed the narratives and the completed analyses, until a consensus was reached (Box 1).

The list of generated phenomena for each subject's narrative was organized into four separate sub-categories. These included: personal response, falls/medical history, daily impact of falls/comorbidities, and interactions with the healthcare system (Box 2).

From the falls clinic consultation letters, major themes were gathered from the identifiable risk factors and recommendations section of the letter. Those performing analyses at this stage were blinded as to which clinical assessments belonged to which narrative. Code analyses of the assessments and narratives for each subject were then compared and assessed for gaps and overlapping phenomena.

Finally, a meeting with CFPC team members was held in order to review our findings and to seek their impressions. The focus group consisted of four members: geriatrician, physical therapist, occupational therapist, and social worker (identified below as SW). With the subjects' consent, the focus group received a copy of the narratives, along with four questions[3] to help facilitate the discussion (Box 3), which was guided by the personal thoughts and impressions of the focus group members. Note that the members of the focus group were involved in the initial evaluations of the subjects in this study.

RESULTS

All five subjects who were recruited were female, ranging in age from 72 to 93 years. Phase II of the narrative interviews, where the patient presented her main narration with minimal prompts from the interviewer, lasted between 0:35 seconds to 16:05 minutes in length. The interviews in their entirety ranged from 4:51 to 19:25 minutes. Subject 2987 had difficulty comprehending the concept of an open and spontaneous narrative. She required additional explanation and prompting to generate content. As this particular interview strayed from the desired narrative interview technique, the resulting transcript was reorganized and truncated to maintain consistency with our study methodology.

Separate analyses of the consultation letter and the subjects' narratives revealed that the clinical assessment and the individuals' perceptions of their medical issues and risk factors for falling showed substantial areas that were common. Each subject's narrative contained at least two of the major risk factors mentioned in the consultation letter. However, there was a noticeable discrepancy between what subjects believed were the primary factors leading to their falls and what the fall assessment team determined to be their greatest fall risk factor. The top fall risk factor itemized in the consultation letters was not mentioned in four of the five narratives.

Analysis of the narratives also revealed differing themes surrounding the emotional and psychological reactions the subjects were experiencing with regards to their falls and health issues, categorized as *personal experience*. While consultation letters mentioned fear of falling, anxiety, depression, and hesitation to give up independence as personal responses to falls, the themes emerging from the narratives were more diverse. *Personal experience* themes from narrative analyses included: frustration, perplexity, hopefulness, embarrassment, anxiety regarding the future, discouragement, and positive perception of one's health. For example, Subject 1091's consultation letter mentioned depression, anxiety, and fear of falling. However, analysis of the following excerpt reveals more complex themes (generated phenomena in bold):

- Well, life was a bit hard after that…living on my own, it's hard, you know shopping and cleaning and dressing myself was very hard. **challenge to independence**
- I didn't cook for quite a while, I had Meals On Wheels for a long time, because of the…just one arm to use, this was always in the sling. **dependence on others**
- And it didn't heal very well 'cause I'm a diabetic, it took very long time to heal. **compounding health complication = diabetes**
- So life was pretty much harder for me. But I got better! I always do! **positive outlook/optimism**
- But unfortunately, five and a half months after, I fell again! But this was, I was shoveling snow, **over-extending activity** and ice from the front of the house, and I broke my hip!

BOX 1. Example of analysis of excerpt from Subject 2987's narrative, with generated phenomena in underlined and bolded font

- *Personal Experience*: thoughts, feelings, emotions
- *Falls/Medical History*: causation of falls, including comorbidities, injuries, etc.
- *Daily impact*: practical effect fall(s) or falling consequences have on daily life
- *Interactions with Healthcare System/Professionals*: positive/negative experiences, thoughts on care received, etc.

BOX 2. Phenomena subcategories

- *What did you hear in the story?*
- *Was there anything that surprised you?*
- *Is there anything in the story that concerns you or makes you uncomfortable?*
- *After reading this narrative, is there anything you would add/change with regards to management of this patient?*

BOX 3. Focus group questions to facilitate discussion

> 1091: So, I'm right in the middle now, of trying to get better [**frustration / discourgagement / wanting to be well**]. And, that's about all I've been doing I guess [**discouragement / wanting to be well**]. And of course, Christmas was bad because you're busy, and you don't get the rest you should, and all that sort of thing …. I'm weak [**discouragement**]. I've lost quite a bit of weight. I'm weak, I have no muscles left, I'm all just flab [**discouragement / mobility challenge**].

Subject 1091's narrative revealed 14 separate *personal experience* phenomena, the highest of the five narratives analyzed and reviewed. The complete list of generated phenomena categorized as personal experience for Subject 1091 can be found in Box 4. The other four narratives generated five to nine discrete phenomena in this category, a greater number than what was obtained from the consultation letter summary in each case.

Members of the focus group reiterated several times that the narratives provided more information regarding a patient's emotional status and personality than what was obtained during their clinical interview. See the following excerpt as an example:

> SW: I think you can get a lot of information from people just telling their story …. A lot of information [comes out] and we can make some kind of assessment of what might be going on, as opposed to just a very structured interview …. The narrative really gives you a lot better sense of the person, obviously. From a very structured assessment, you wouldn't pick all that up. Just letting people talk and tell stories, it's very different, and all of these [narratives] have been very different.

The consultation letter was also noted to be deficient in highlighting qualities that might prove beneficial in rehabilitating the patient and in preventing further falls.

- not feeling in control
- complexity
- appreciation of help received
- diabetes; fear
- fixation on MRI; wanting solution
- negative healthcare experience; anger
- hopefulness
- frustration
- fear of falling
- fear of consequences of falling
- feeling imposed upon
- embarrassment
- worry about the future
- discouragement / wanting to be well

BOX 4. Personal experience phenomena generated from intrathematic analysis of Subject 1091's narrative

For example, analysis of Subject 3861's narrative revealed a very positive, proactive approach on the part of the patient who was strongly motivated both to preserve and to improve her health:

> 3681: I've done an awful lot of walking and I've got good strength in my legs. And if I pay attention as I walk, if I hear something or see something, don't look up, stop and pay attention before you go on. And I think that helps for preventing falling …. And I don't go to places that I'm not sure of myself anymore. So, I think that this is going to do me a lot of good and you can check with me in a year's time, and I'll say "so, I haven't fallen!"

Mention of her positive attitude was absent from her consultation letter. On reflection, the CFPC team noted that none of the consultation letters made note of the individual strengths of the other four subjects.

DISCUSSION

Hsu and McCormack[3] argued that the use of narratives, particular those of older persons, can help health providers better understand their patients during hospitalizations. Though this study deals with community-based experiences, our findings suggest that narratives have the potential to add a great deal of information pertaining to the narrator's thoughts and feelings regarding their health and the care they have received. An inherent benefit of the narrative interview is that the narrator has the ability to decide how the story is told, what is included, and how long the interview lasts.[5] We took steps to try to minimize the impact of the interviewer, and to allow the subjects to narrate freely. Though high variability was seen in the lengths of the spontaneous narratives, the differences in the amount of detail given by the subjects provided further insight into the subjects' responses to the event in question.

Despite not spending a large amount of time reading and analyzing the narratives, the CFPC focus group was able to pull out major themes and felt they better understood the subjects' personality and emotional states after reading through their stories. The analysis of Subject 1091's narrative, in particular, yielded a great deal of information pertaining to her personal feelings regarding her falls and other health issues. The CFPC focus group concluded Subject 1091 felt overwhelmed by her health challenges and was pessimistic that the recommendations would be followed. Such information was thought to be helpful when trying to predict whether individual clients will be adhere to the recommendations made. There is evidence that belief-laden variables, including perception of control over one's health and illness, greatly influences adherence to recommended therapy.[15] Based on its discussions, the CFPC focus group decided it would be prudent to prioritize and limit the number of recommendations for clients who may already feel overwhelmed by their situation.

It is difficult to speculate whether the narrative interview technique in the form presented here could be practically implemented into the assessment of fall patients. Currently, structured in-home assessments can take up to three hours to complete. Focus group members worried that the narrative interview itself would be too time-consuming to add to an already lengthy visit. Furthermore, it was noted that the narrative interview had limited utility in determining specific details and the chronology of events, which can be important when analyzing the causes of the fall and what can be done about them. These concerns may be rectified by focusing and refining the narrative topic. The statement used to initiate the narrative in our study (the subject's life before and immediately after their falls) was broad in scope. More specific questions such as "How was your recovery from your last fall?" or "What was it like following the recommendations we gave you?" would still permit the patient to narrate freely while allowing the interviewing health-care provider to focus the interview on obtaining the information specifically required.

Our volunteer pool of subjects consisted of cognitively intact individuals who were likely more talkative and outgoing than the typical referred person. It is unknown whether informative narratives could still be obtained from more introverted individuals with less panache for story-telling in response to an open-ended question. As seen with Subject 2987, the idea of telling a narrative about oneself may be daunting to some. Again, a more focused central topic may help counter this potential barrier.

The limitations of this project should be acknowledged. Our small sample size and variable length of narratives makes generalization of our specific findings inappropriate. Each subject had a pointedly different response and outlook regarding their falls. It is likely that given a larger sample, greater variety and complexity of themes would emerge and perhaps prove to be clinically relevant. Secondly, as with any qualitative research, the analyses of the narratives were subject to the biases of the researchers. In this case, we tried to deal with this issue by having two independent analyses done on every transcript, one by the interviewer and the second by someone whose sole exposure to the narrative was by reading the transcribed interview. However, as Overcash argues,[5] the malleability in understanding the human experience is a largely the appeal of narrative methods. Some academics argue that debating validity in regard to qualitative narrative research is moot; a narrative is expected to change in the very act of telling and re-telling or interpreting.[16] Though we are unable to comment on the validity of the subjects' specific perspectives and responses or whether the perspectives we derived were unavoidably biased, the narratives did provide a much richer patient perspective than the consultation letter alone.

CONCLUSION

Overall, the CFPC focus group found the narratives helpful when used in conjunction with the assessment methods already in place. Those in attendance were optimistic that the additional information gathered with regard to personal experiences and responses to health challenges would be useful in understanding a patient's priorities and recognizing barriers to following through with recommendations. Based on its discussion of the stories provided, the focus group proposed several changes to the assessment process to capture missing information revealed by the narratives. These included allowing patients to openly discuss what they saw as their major health concerns, prioritizing and limiting the number of recommendations given to patients, probing for the acceptability of potential recommendations, and identifying patient strengths in the consultation letter sent to other health-care providers. While the results of this pilot study are promising, further research is needed to determine whether incorporating patient narratives within the assessment process will result in better outcomes with respect to fall recovery and prevention.

ACKNOWLEDGEMENTS

We would like to thank the five patients and four CFPC health-care professionals who participated in this study. Without their participation and insights this study would not have been possible.

CONFLICT OF INTEREST DISCLOSURES

The authors declare that no conflicts of interest exist.

REFERENCES

1. Greenhalgh T. Narrative based medicine: narrative based medicine in an evidence based world. *BMJ*. 1999;318(7179):323–25.
2. Hatem D, Rider EA. Sharing stories: narrative medicine in an evidence-based world. *Patient Educ Couns*. 2004;54(3):251–53.
3. Hsu MY, McCormack B. Using narrative inquiry with older people to inform practice and service developments. *J Clin Nurs*. 2012;21(5-6):841–49.
4. Hurwitz, B, Greenhalgh, T, Skultans, V. Narrative research in health and illness. Malden, MA: BMA Books/Blackwell Pub.; 2004.
5. Overcash JA. Narrative research: a review of methodology and relevance to clinical practice. *Crit Rev Oncol*. 2003;48(2):179–84.
6. Stanbrook MB, Kelsall D, Macdonald NE, *et al*. Early and continuing education: a prescription for achieving patient-centred care. *CMAJ*. 2012;184(1):E3.
7. Boyd R, Stevens JA. Falls and fear of falling: burden, beliefs and behaviours. *Age Ageing*. 2009;38(4):423–28.
8. Alberta Centre for Injury Control & Research. Seniors' falls injuries in Alberta. Edmonton, AB: Alberta Centre for Injury Control & Research; 2009.
9. Alexander BH, Rivara FP, Wolf ME. The cost and frequency of hospitalization for fall-related injuries in older adults. *Am J Public Health*. 1992;82(7):1020–23.
10. Public Health Agency of Canada. Report on seniors' falls in Canada. Ottawa, ON: Public Health Agency of Canada; 2011.

11. Gillespie LD, Robertson MC, Gillespie WJ, *et al*. Interventions for preventing falls in older people living in the community. *Cochrane Database Syst Rev*. 2009;(2):CD007146.
12. Jovchelovitch S, Bauer MW. Narrative interviewing. In: Bauer MW, Gaskell G, editors. Qualitiative researching with text, image and sound: a practical handbook. London: SAGE Publications; 2000:57–74.
13. Luborsky MR. The identification and analysis of themes and patterns. In: Gubrium JF, Sankar A, editors. Qualitative methods in aging research. Thousand Oaks, CA: Sage; 1994:294.
14. Strauss, AL, Corbin, JM. Basics of qualitative research: techniques and procedures for developing grounded theory, 2nd edition. Thousand Oaks, CA: Sage Publications; 1998.
15. Chia L, Schlenk EA, Dunbar-Jacob J. Effect of personal and cultural beliefs on medication adherence in the elderly. *Drugs Aging*. 2006;23(3):191–202.
16. Sandelowski M. Telling stories: narrative approaches in qualitative research. *J Nurs Sch*. 1991;23(3):161–66.

Correspondence to: Ms. Carolyn Wong, BSc, Faculty of Medicine, University of Calgary, #420-5115 Richard Rd SW, Calgary AB T3E 7M7, Canada
E-mail: wongca@ucalgary.ca