The Use of Narrative Practices by Expatriate Health Care Providers treating Ebola Patients in Western Africa from 2013 to 2016

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ABSTRACT

Purpose:
The purpose of this study was to examine reasons why expatriate health care providers employed narrative practices for therapeutic purposes, related to the medical care they provided in West Africa during the Ebola outbreak of 2013 to 2016.

Methods:
Convenience purposive sampling was used to recruit providers in the study. Participants consisted of twenty nurse practitioners, nurses, and physicians from US-based non-governmental organizations (NGOs) working in Ebola Treatment Units (ETUs) either in Sierra Leone or Liberia. Thematic and framework analyses based on a grounded theory approach were employed to analyze data from key informant interviews.

Results:
Narrative practices in the form of writing, visual arts, music, or presentations were utilized by the health care providers. Timing of their composition, in the field or upon their return, affected the reasoning behind their use and their content, in addition to their decision to share publicly or retain privately.

Conclusions:
Examination of the reasons why expatriate health care providers made use of narrative practices demonstrates a variety of personal therapeutic use. Therapeutic benefits include recording of daily details as to not forget, sharing a wider understanding with the general public, relinquishing frustration or anger, or communicating a meaningful or beautiful experience among the disarray and chaos they experienced. Results from the study suggest that a benefit of narrative practices may support the mitigation of compassion fatigue among humanitarian aid workers.
INTRODUCTION

Documenting experiences in the field as a form of “narrative practices” includes an aggregate of creative mediums such as journaling, illustration, debriefing interviews, and public commentaries. Existing evidence suggests that talking or writing about past emotional experiences can produce health benefits, including improved physical health, psychosocial well-being, physiological functioning, and overall general functioning in addition to greater adaptive outcomes among adversity or chaos (Ellis and Cromby; Hauser, Golden and Allen).

This study examined the potential for narrative practices, employed by expatriate health care workers who volunteered in the humanitarian response to the Ebola outbreak in western Africa, as a possible means to mitigate compassion fatigue. More specifically, it focused on the reasons as to why expatriate health care providers used narrative practices. Investigation of narrative practices utilized before or after the response provided insight into the context of care providers' motivations and experiences during the response and further shed light on the reasoning behind their decision to make use of narrative practices, or not. Understanding the underlying basis as to why humanitarian aid workers use narrative practices could better address the prevention of burnout and compassion fatigue in the field. Ultimately, these findings could help impact the field of humanitarian aid by finding better means to respond to psychosocial stresses encountered by workers in the field, to potentially improve aid worker retention, and improve quality of life in humanitarian work settings abroad.
Two health behavior theories, the Ecological Model and Social Cognitive Theory, were implemented to design this conceptual framework (Figure 1). The Ecological Model of health behavior asserts that surrounding levels of influence affect the health behavior of the individual (Sallis, Owen and Fisher). Examples of these surrounding levels of influence include the interpersonal-level (families or friends of the health care provider), organizational-level (such as the organization or location in which the provider worked), community-level (the relationships between NGO and the surrounding community), and public policy (such as laws related to Ebola, such as quarantine). Due to the overlapping nature of these levels in the Ecological Model, communication between the various levels of influence ultimately affects the health behavior of the individual. If utilizing narrative practices is viewed as the health behavior of interest for the expatriate health care provider, how do these relationships with various colleagues affect their decision to use narrative practices? What are the effects of poor organizational management or policies such as mandatory quarantine relating to narrative practices? The context of policy and the environment (in concert with other social influences), also relates to the health care provider’s experience while providing humanitarian work.

A second theory of health behavior appropriate to the relevant research is Social Cognitive Theory (SCT). SCT asserts that learning occurs in a social context, in a reciprocal interaction between the person, environment, and behavior (Bandura). SCT takes into account the social interaction between cognitive factors (such as knowledge, expectations, or attitudes), environmental factors (like social norms), and behavioral factors (skills, practice, or self-efficacy) surrounding an individual to help determine whether or not they engage in a specific behavior. SCT theory applies to the context of whether or not expatriate health care providers utilize narrative practices for therapeutic purposes - personal factors, such as previous work in other humanitarian settings, the surrounding environment of West Africa during the Ebola outbreak, and their behavior in the field all interplay together towards learning and influencing their own behavior. Both the Ecological Model and SCT take into consideration the various levels of influence from the environment and how that affects the learning and behavior of the individual; to examine the various means to which expatriate health care providers utilize narrative practices for therapeutic purposes, one must also consider the surrounding environmental influences and social interaction of learned behavior.

Figure 1: Conceptual Framework
METHODS

Study Design, Participants, and Data Collection

This research represents a small study embedded within a larger study that examined compassion fatigue, compassion satisfaction, and the use of narrative practices among expatriate healthcare providers who provided patient care to Ebola patients (Cunningham). This mixed methods descriptive study consisted of data collected by a doctoral candidate from Columbia University Mailman School of Public Health to test and validate the Professional Quality of Life (ProQOL) Elements Theory and Measurement Scale (Stamm). Additionally, a subgroup of providers volunteered to be interviewed to further explore the use and benefits or risks of narrative practices.

Purposive sampling was used to recruit health care providers as participants in the study. Participants consisted of nurse practitioners, nurses, and physicians from US-based non-governmental organizations (NGOs) working in Ebola Treatment Units (ETUs) either in Sierra Leone or Liberia. The quantitative ProQOL survey was administered to all participants using a secure online platform in which data were collected anonymously. Participants who both responded to a prompt on the survey asking if they had used narrative methods while working with Ebola patients and provided an email address, were self-selected to conduct a follow up key-informant interview to investigate further their utilization of narrative practices. For the purposes of this subset of research, “narrative practices” were defined as any form of expression used as a coping mechanism for therapeutic purposes – this included writing, visual arts, and music. Interviews were conducted via Skype or FaceTime and recorded with interview length averaging just over 24 minutes. A total of twenty key-informant interviews were conducted and transcribed by a professional service. Identifying data consisting of interviewee names, interviewer name, addresses, or names of other immediate colleagues were removed and deleted from the transcripts prior to analysis.

Institutional Review Board Approval

IRB approval was obtained from Columbia University Medical Center at the onset of the research study. Consent was obtained from all study participants prior to survey intake and the interviews.

Data Analysis

A grounded theory approach (Glaser, Strauss and Strutzcl) was used to develop a conceptual framework and baseline theory about expatriate providers’ employment of narrative practices. Upon first readings of the data set, thematic analysis was employed to apply an inductive approach to help identify patterns and themes from the data. Framework analysis (Smith and
Firth) was utilized to gather familiarity with and immersion in the data set. Margin notes were recorded to create tentative labels for sections of data prior to coding. After multiple iterations of reading through the interview transcripts, a codebook consisting of 22 codes was developed in order to provide a set of instructions for open coding of the complete data set. Transcripts were uploaded to Dedoose, a web application system for mixed methods research (Dedoose). Codes were created based upon the results from thematic and framework analyses, highlighting the postulated themes from the data set. Results from open coding were organized into a conceptual and time-ordered data display matrix to visualize and arrange data in a coherent manner upon which patterns, themes, and trends were observed. Examination of the display revealed discrepancies in the data based on form of practice used, location whereupon narrative practices were utilized, and whether or not they were shared publicly or kept private.

Validity and Reliability

Confidence in the validity of the findings was obtained from multiple approaches. Researcher bias was addressed in a subjectivity memo: a self-reflection and identification of the potential biases present in the context of the researcher’s upbringing, previous experiences, and relationships with others. Peer review and debriefings with colleagues, professors, and teaching assistants were also implemented during the study to provide external checks of the research process for the formulation of the research question, conceptual framework, codebook, and data display. The codebook evolved during multiple iterations of reading of the transcripts to improve definitions, provide better specificity of when to use and not-use, in addition to the incorporation of representative quotations to exemplify best the appropriate utilization of codes during open coding.

Reliability of the data was established from the calculation of an inter-coder agreement rate to measure the clarity of code definitions and overall reliability of the data. The inter-coder agreement rate was calculated by determining the number of agreements in coding to total number of codes from a five-page portion of a transcript between two different coders. An inter-coder agreement rate of greater than 50% was achieved. Reasons behind the initially low rate were accredited to vague coding definitions and lack of specificity in the “when to use” description, as opposed to inappropriate use of codes. In response, the codebook was updated with specified code definitions and more clarified “when to use” criteria. All codes where inter-coder agreement was low were verified for clarity with the original coding partner. Additionally, the role and status of the primary researcher was clearly stated at the onset of all key informant interviews, preventing the potential for researcher effects on the setting.

RESULTS

Data analysis revealed three overlapping themes affecting the utilization of narrative methods: form of narrative practice, location (in the field or back home upon return), and public vs. private disclosure. Interplay between these three themes revealed the various reasons why (or why not) expatriate health care providers utilized narrative practices based on their coping mechanisms and therapeutic needs both during and after return from their time in the field.
Form of Narrative Practice

Writing

Writing, both in the field and at home upon return, was a technique applied by several returning health care providers. Writing in the field appeared to be more of “journaling”, consisting of free-flowing writing, both reflective and factual, with record keeping of the daily details as a means to remember:

“Yeah, so writing tends to be more free-flowing and I don’t go back. I mean, I go back to read but I don’t go back to delve and make sure I got it right. It tends to much more be this kind of stream of consciousness writing” (Transcript 20, 325-327)

“I think the thing that was surprising to me was that it was hard for me to put any emotion in it. It just kind of... I just couldn’t and that was just very...factual” (Transcript 12, 124-126)

Writing while in the field appeared to be more for personal purposes, used as a therapeutic tool or coping mechanism while in the field during the response:

“It was incredibly therapeutic. Because it allowed me to think for many reasons. Like, there’s the act of just, like, saying it and then writing it but then also the act of organizing my thoughts…” (Transcript 5, 531-536)

Writing conducted in the field that was also shared publicly served several purposes for the providers: It created a feeling of connection with others while in the field, provided a means by which to spread a political message, and relayed the “raw” reality of working in the field during the response:

“With writing, I think, when I wrote, the most intimate piece I wrote was basically it came straight out of my journal, and I just typed up everything I had written and then edited it to make it a little bit more, you know, narrative in its format, but it was just freeform when I was writing it, when I was in the field. And you know, I kind of didn’t want to mess with it because it was so real and it was so raw, and that’s what I wanted people to sort of feel, you know?” (Transcript 18, 130-135)

Alternatively, writing upon return at home reflected a different use for providers. Writing conducted at home was all coded as public, used for mission-driven purposes such as duty to contribute knowledge in the field, wanting to emphasize the beauty within the despair or share a truly meaningful experience with others who had no understanding of the context abroad:

“I have a greater responsibility, you know, and that greater responsibility is more sort of academic/clinical writing, to make sure that we can further educate, you know, people about emerging infectious, nurses, you know, health care folks about emerging infectious diseases, you know, and that’s really where my writing has gone.” (Transcript 3, 355-358)

“And so I wanted to not pull people just there and stop. I wanted it to be progressive, like, “Yeah, this was really awful”, but this was, you know, occurred in a time where in a country that was stunning, amongst a people that were beautiful,
and, you know, I was able to meet and work with these really talented motivational health care professionals like I’d never worked with in my whole life” (Transcript 3, 286-291)

“So the Ebola writing I don’t think there was a conscious message per se other than I wanted to get across to people like that this wasn’t just Africans dying. You know, AFRICANS DYING. Like you can’t lump this together. Like this was individual human beings with families, and lives, and plans for their future, and children, and neighbors, and like the people who died there were us just over there.” (Transcript 10, 321-325)

Overall, writing as a form of narrative practice provided a therapeutic means for providers to express their experiences during their time in the field or as a reflection upon return. While frequency in the data set does not necessarily correlate with occurrence in the field, a greater number of written compositions shared publicly were composed at home, in comparison to more personal, and henceforth private, journaling conducted in the field.

Visual Arts
Visual arts in the form of painting and photography were composed at home and in the field, respectively, and were both shared publicly and held private. Photos taken in the field were deeply personal and shared only with close family members as a means of communicating context and the environment in West Africa during the outbreak:

“The only person that really asked to look at my pictures was my wife and we did it one time, and I’ve given talks about Ebola in a bunch of different settings. I mean, leadership lessons from Ebola and stuff, but as I look through the pictures, I think they’re just intensely personal.” (Transcript 15, 337-340)

For others, the wish to share photos publicly provided a means to help the general public better understand the setting of the ETU and surrounding environment:

“I can’t get the dates right and I can’t get the pictures stuck in and, you know, but I do like the blog idea because we, of course, couldn’t take pictures in the treatment setting but I did take some pictures generally and I think that pictures really help.” (Transcript 7, 341-344)

The visual arts also provided a method for the provider to share their story, offer closure, and allow their memories to live on:

“So the art for me in like the selfish reasons of wanting to do this is because I feel like it’s a way that I can tell the stories and have the stories live on, and they’re not going to be graphic stories of people bleeding and kids dying and people being in…you know, having to have their bones broken in order to get into body bags and, you know, that I can tell those stories and these three artists who I really, really trust will take those stories and will make their art with them. And so it will hopefully serve my need of needing to kind of put some of this to rest, some closure to some of it. And hopefully the memories will live on.” (Transcript 4, 423-434)
The visual arts afforded expatriate health providers the opportunity to present an explanation of their experience or share their story with communities back home that may not have a full understanding of the complexities and challenges of the work with Ebola patients.

**Music**

Music, defined as vocal or instrumental sounds produced to form harmony and expression of emotion, was employed both in the field and upon return. Music in the field appears to have provided a form of therapeutic benefit for the provider:

“I played my harmonica and that to me was important. I wrote a couple songs which I will, I'll send you the recording of.” (Transcript 8, 320-321)

Music conducted at home upon return was performed for a live audience and therefore shared publicly:

“And so I feel like with the music, I was able to write a song that if you were there, you'll catch probably, at least hopefully you'll catch lines here and there, and it will be a really meaningful song. And if you weren't there, you'll catch the parts that resonate with you, and you won't catch the other parts, and that's fine.” (Transcript 4, 412-419)

Writing music and performing to a wider audience offered the provider a form of narrative practice granting the opportunity to tell his/her story and allow the listeners to absorb the parts that resonate with themselves, providing a meaningful and deeply personal perspective shared with the broader public.

**Presentation**

Any presentation, given formally or informally to an audience depicting the provider’s experience addressing the outbreak of Ebola, was considered a form of narrative practice by the researcher. All presentations were coded as public, although the degree of “public” ranged from a small group of students to an entire global health conference. Presenting to various sizes of audiences appears to have provided the health care worker with the opportunity to “process” their experiences:

“But I spoke a lot in academic venues and private lectures about the experience, and talking about it over and over again I think helped me synthesize and analyze it.” (Transcript 18, 111-113)

“… I gave a talk at a global health course at the local university and that helped me process. I think that was the most therapeutic thing I did for myself because generating that talk helped me process a lot of the images and the stories and I’ve always been a believer that when you’ve been through trauma which I think we all went through, that the ability to tell a story about the trauma and have it make sense and not have it just seem random and horrible helps people heal.” (Transcript 2, 70-75)
Presentation as a form of narrative practice also provided the opportunity to express the beauty of the people, country, or experiences to see beyond the despair of the outbreak of Ebola:

“And when I presented, and I actually just presented again at a global health conference here. Not explicitly about Ebola, but Ebola always creeps in. But I said to people that it’s not all negative. Right? I mean, there’s this, you know, beauty we get from the poignancy of sharing in people’s lives and sharing their journey and being present and how critical it is to be present even if you can’t do anything or you can’t do what we’re really trained to do.” (Transcript 20, 434-439)

Presenting to an audience upon return appears to have provided a form of therapeutic effect for some providers, or otherwise helped them process the experience. Others presented to share the beauty (or poignancy) of sharing peoples’ lives or to help the broader public understand a particular message that the provider wanted to get across.

Public vs. Private Disclosure
Observation of the distinction between narrative practices shared publicly versus those kept private provided insight into the reasons behind their mode of utilization. Reasons for keeping narrative practices private included the desire to write in a free-flow manner (without consciousness or editing), not feeling comfortable publicizing, and wanting to keep “survivor’s guilt” private:

“And also I felt like, you know, my editor’s, my survivor’s guilt was my own business. Do you know what I mean? That’s not something that I, I don’t need to share that. I was like that person’s plight was much more important to be highlighted.” (Transcript 18, 178-181)

Interestingly, one provider felt as though the general public did not want to hear the “ugly” truths about his/her experience and therefore retained those as private:

“But I don’t think that most people are ready or want to hear the realities of everything that happened, and I often have a hard time telling stories without kind of getting into the bad parts of it.” (Transcript 4, 406-408)

Reasons for releasing narrative practices publicly included sharing a message for recipients to receive a particular message, relaying a true “point of story”, or wanting people to know what they were doing:

“Yeah. I feel like I’m a good writer, and I have a certain, you know, mild ambition to write, and I thought people would be interested. I felt like I had things to say. I felt like the work stimulated thoughts that were interesting.” (Transcript 9, 328-330)

“The point of the story is, like, to help you understand the nature of it, you know?” (Transcript 5, 621-622)
“People wanted to know what I was doing. You know, and I wanted to be able to tell them what I was doing and to sort of get that message across. And then it stayed public because it mattered to people to read it because people would write back and say, you know, “Thank you for writing that and, you know, I’ve felt that way about patients before, or I’ve had that experience and I wasn’t able to articulate that.” You know, and it seemed to…it certainly was helpful to me to get feedback from people like I read it. I hear you. You know, I’m glad you said that. But also it seemed in some small instances to be helpful to other people. So, you know, that just sort of became the medium at that point.” (Transcript 10, 347-355)

Downstream effects to publicizing narrative practices also included therapeutic benefits and receiving support from other readers:

“and then I did the thing…the Bill Gates thing. The TED conference. And that was, while not mine, it was a little bit of creativity in that we recreated an ETU and we told stories and took scientists and pressed through which really…man, that was therapeutic, too.” (Transcript 2, 148-151)

**DISCUSSION**

Writing in the field that was kept private, proved to be more of personal journaling with free-flow prose, as opposed to written compositions shared publicly; these public writings tended to be shared as a means to create a feeling of connection with others, to spread a political message, or assist in demonstrating the “raw” reality of working in the field, unfathomable to an audience far removed from the outbreak. Furthermore, published writing composed upon return was a form of narrative practice utilized for mission-driven purposes such as duty to contribute knowledge in the field and the desire to share the beauty within the despair or a truly meaningful experience with others who had no understanding of the context abroad. The visual arts also proved as a form of narrative practice, utilized by health providers as a means to share deep and personal experiences, in a helpful way, such that a picture is worth a thousand words. Utilizing the visual arts to depict experiences abroad also offered closure and a way for providers’ memories to live on. Music also provided therapeutic benefit to providers, performed privately in the field or in front of a live audience. Music in particular, provided the platform for the provider to share their story and allow the listener to interpret the parts that particularly resonate with themselves, alleviating a sort of “storyteller burden” from the provider. Lastly, presenting both formal and informal presentations allowed several providers the opportunity to process their experiences, providing therapeutic benefits in a cathartic process. Furthermore, presentations also proved as a platform to express the beauty or positives of the people, country, or experiences to see beyond the despair of the outbreak of Ebola, to share a truly meaningful and personal story with a general audience.

Application of thematic analysis to the data set highlighted several elements from the conceptual framework. Several surrounding levels of influence were found to have affected the health behavior of expatriate health care providers in their decision to utilize narrative practices or not. Interpersonal-level interactions with spouses and other family members at times promoted the use of narrative practices, through sharing of photographs or journal entries, to
the composition of music and the visual arts. Interaction between the provider, cognitive factors, and behavioral factors also demonstrated applicability of social cognitive theory – such as the desire to share learned knowledge within the field of medicine with colleagues upon return.

Results from the study suggest utilization of narrative practices as a suitable means for health care providers to properly address difficulties working in a stressful and traumatic environment. Possible health benefits to writing about such emotional experiences include improved physical health, psychosocial well-being, physiological functioning, and overall general functioning in addition to greater adaptive outcomes among adversity or chaos (Hauser, Golden and Allen). Understanding the underlying basis as to why humanitarian aid workers use narrative practices can better address the prevention of burnout and compassion fatigue in the field. Ultimately, these findings help impact the field of humanitarian aid by suggesting a better means to respond to psychosocial stresses encountered by workers in the field to improve aid worker retention and better maintenance of humanitarian missions abroad. Encouraging expression through writing, visual arts, music, or presentations could reduce burnout and compassion fatigue, thus providing added health benefits to the humanitarian aid worker.
REFERENCES:


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