Original Article

Ambiguity and uncertainty in 'breaking bad news' simulation: lessons from standardized patients' different personality types

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Abstract: **Introduction**: Ambiguity and uncertainty are intrinsic aspects of contemporary medicine, and there is a need for methods to train medical students to tolerate them better. This article distinguishes the ways that different standardized patient (SP) personality types provide opportunities for medical students to practice tolerating ambiguity and uncertainty associated with breaking bad news (BBN). **Methods**: This ethnographic study draws data from nine student encounters with two female SPs who specialize in the BBN simulation. It utilizes the literary concepts of “unfinalizability” and parallel “time zones” to reflect upon manifestations of uncertainty and ambiguity in SP performances. **Results**: The SPs challenged the linear progression of the BBN encounter by including shifts between different time zones in the patient’s mental-experiential continuum. The study identified seven main forms of resistance in the SP performance, all geared toward challenging the linear and complete conduct of the student performance: resisting being considered a patient, resisting decision-making, resisting authority, resisting here-and-now, resisting being seated, resisting closure, and resisting death/life. **Discussion**: The SPs’ distinct personality types have the potential to improve students’ ability to respond to individuals with different temporal orientations, and support them to tolerate encounters with various kinds of open endings.

Keywords: Ambiguity; Breaking bad news; Medical education; Performative techniques; Standardized patients; Time perception; Uncertainty; Unfinalizability.

Introduction

Ambiguity and uncertainty are intrinsic aspects of contemporary medicine, and it is considered that they should be attended as a formal part of medical curricula.[1] However, while tolerance for ambiguity has been recognized as one of the fundamental skills in developing an anti-authoritarian professional identity,[2] patient scenarios often reorganize the chaotic real-life events into well-ordered

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linear narratives with expected endings.[3] This paper considers human simulation with standardized patients (SP) as an aspect of medical education that has capacity to stimulate the students' tolerance of ambiguity and uncertainty in inventive ways. It focuses on a "breaking bad news" (BBN) scenario, which is one of the many simulated encounters the standardized patients perform, helping medical students to practice their clinical and interpersonal skills. In this paper we will discuss the distinct personality types or emotional states and repertoires of responses the SPs utilize in the simulation. We will distinguish specific ways the different personality types challenge the progression of the BBN encounter, and how these provide the student opportunities to practice tolerating ambiguity and uncertainty associated with breaking bad news. The experiences of ambiguity and uncertainty are interlinked in that ambiguity typically leads to uncertainty. The study thus aligns with Ellsberg's definition of ambiguity, considering it as either a lack of information or a fuzzy perception of the decisional context, which results in uncertainty about probabilities on events.[4]

Breaking bad news simulation differs from a typical medical encounter in which the physician is "taking" a patient history: in this scenario the patient does not draft an illness narrative to be interpreted by a doctor, but the doctor initially is the storyteller-performer "giving" the bad news. We here align with Jay Baruch's framing of the physician as a protagonist in the (simulation) scenario as well, holding a co-creative view on clinical encounter.[5] Our study focuses on subjective meanings generated by two SPs participants, arriving at suggestive categories for how the SP performance manifests ambiguity and uncertainty in the BBN simulation.

The breaking bad news (BBN) scenario discussed in this paper concerns the three personality types attributed to the fictional character known as "Ms. Kelly". While previous studies have examined the performance of a single standardized patient character in different simulation scenarios, the portrayal of several distinct personality types in the same simulation scenario, performed by a single standardized patient, has thus far been unexamined.[6] To be clear, the scenario discussed here does not involve a portrayal of a multiple personality disorder, but rather, each personality type is being performed one at a time in a different student encounter. Each of the three personality types of Ms. Kelly, the angry, sad, and unfocused, includes a repertoire of expressions and appearances.

Materials and Methods

In the medical school where this study took place, the teaching of breaking bad news in a large classroom setting has for many years revolved around a script of a female character named "Shannon Kelly". This character is currently performed by two experienced female SPs, both of whom perform all three of the Ms. Kelly's personality types (as they are called in the SP script), for over a decade now. While many SPs have skills to demonstrate emotional variance, the BBN simulation presents a specific challenge because the SP has to switch between the personality types during the short class feedback in-between the student encounters. The authors observed five large classroom sessions of a breaking bad news simulation in 2015-2016, and video-recorded three of them for further analysis. Each of the three sessions included three student encounters with one SP, totaling in nine breaking bad news simulation encounters across the recordings. The BBN scenario used in the medical school of this study is based on standards established by the 1996 Southern California Macy Consortium,[7] and adapted by the faculty at the medical school. The SPs had been prepared extensively by the training team of the simulation center at the medical school, using a script that includes suggestions and options for presentation and emotional tone but no detailed directions how to challenge the student's performance. The authors of this study did not play any role in the development or adaptation of the script,

or training of the SPs.

In the scenario Shannon Kelly arrives at the doctor's office expecting to pick up a pre-employment form documenting the results of a routine physical exam that she must submit before starting a new job. However, instead of receiving the form from her usual doctor, she is seen by a substitute doctor, played by the medical trainee, who tells her that there are findings in the CT scan of her lungs that look like cancer and will require a biopsy to confirm the diagnosis.

We utilize two literary concepts in reflecting on the specific lessons about uncertainty and ambiguity offered by the standardized patients in a breaking bad news simulation. First, we employ literary theorist Mikhail Bakhtin's concept of "unfinalizability" to reflect upon the multiple open endings the SPs generate through their personality types.[8] The concept of unfinalizability has been previously used to discuss the doctor-patient relationship, paralleling the physician with an author: "unfinalizability is what requires the physician to speak with him, not about him".[9] Second, as a means of ambiguity and uncertainty cultivation, confusion of past, present and future is central to this simulation. Here the study draws from writer Jeanette Winterson's notion of different "time zones" we continuously hold in our mind.[10] The time zones are here seen as literary and performative equivalents of psychological time perspectives, often interchangeably called as time attitude, temporal orientation or time perception,[11] which influence the doctor-patient relationship,[12] health behaviors,[13] or desire to die,[14] for instance.

This film-based ethnographic study uses a grounded theory approach.[15] Instead of proceeding in separate linear steps, grounded theory is iterative of nature and intertwines data collection with data analysis. Thus, the philosophical concepts we used to sample the data were selected based on the initial open coding. We identified the phenomenon of interruption or antagonism in the SP's performance regarding the progression of the student performance. This phenomenon, or a performative technique, was chosen as a focus of the subsequent analysis iterations and was filtered through the two philosophical concepts on the disruption of temporal unity of a person. The analysis resulted in descriptive classification of seven forms of "resistance" in the SPs performance.

Results

Ambiguity and uncertainty through Ms. Kelly's personality types

The techniques through which SPs challenge the medical trainee's performance typically involve unfinalizability on some level, as well as fusion or rapid alternation between the character's internal time-zones. Indeed, the SPs resist finalization and the here-and-now by their performance in many ways. By resistance we mean both scripted and unscripted performative techniques through which the SP purposefully challenges an uncomplicated and linear progression of the encounter. Our study identified seven main forms of resistance in the SP performance, through which they are providing the student an opportunity to develop tolerance for ambiguity and uncertainty.

Resisting being considered a patient

The angry Ms. Kelly fundamentally resists being considered a patient. After all, she just came to pick up a pre-employment health check form and being a patient is not part of her current identity. They demonstrate their resistance by disbelieving the diagnosis, or doubting that the results would be theirs. The SPs' performance reveals how the bad news forces the character of Ms. Kelly to enact a rethinking of her identity. In the beginning of the scenario she considers herself a lucky new employee collecting her pre-employment form, but as the scenario progresses, she is unexpectedly addressed as a patient, potentially a cancer patient. There is not only uncertainty of the future but the present diagnosis is also not conclusive either. The student is thus here facing a challenge in

bridging the gap between what the patient's understanding of the situation is and what the doctor knows.

Resisting decision-making

The fate of becoming a cancer patient, and the diagnosis, however, is not finalized without running follow-up tests, resulting sometimes in the sad and the angry Ms. Kelly personality types wondering whether they actually want to undergo further tests. This emotional ambivalence demonstrates to the medical trainees that some patients will not want to hear the whole truth;[16] as long as Ms. Kelly does not have the biopsy done, she is not a cancer patient yet.

Resisting authority

The character does not only resist being finalized as a patient, she also pinpoints the student's ambivalent status as a doctor. Namely, to accentuate the unfinalizability concerning the student's professional knowledge, Ms. Kelly purposefully asks questions that the students have been instructed not to answer in any detail, such as the details of biopsy procedure. In doing so, the SPs are inviting the student to explore appropriate ways of saying "I don't know," thus facilitating the development of the 'professional rhetoric of uncertainty',[17] instead of making something up and being overconfident about their level of expertise.

Resisting here-and-now

From Miss Kelly's point of view, the breaking bad news encounter is a mere scene, albeit a pivotal one, in her life story; aspects of which the medical student will be made aware of. That is, the SP uses a variety of indications of her life beyond the consultation room, including her recent and distant past and future, such as family relationships and histories of illness. One of the three personality types of Ms. Kelly is unfocused or distracted, usually performed as the last of the three encounters. One of the lessons offered by this emotional state relates to the patient's scattered and ongoing chatter, leaping back and forth between various moments in the far and near past and future. She, for instance, talks to a friend on her phone and plans to have lunch with them just after the encounter, shows the student a photo of her grandbaby, and recalls a family member who had cancer. What's more, she gets sidetracked by picking up a fashion magazine and asking a question about make up to the physician. In order for the student to proceed, the SP often needs to help out; she "realizes" that in her constant chatter she has interrupted the doctor, and steers the focus back to the CT scan.

Resisting being seated

Besides fluidity of time, the unfocused Ms. Kelly evades stagnant positioning; whereas both the sad and angry types wait for the doctor by being anchored in the patient's seat, the unfocused Ms. Kelly roams around the office talking on her mobile phone. This continues even when the student doctor enters the room, and it is their task to "herd" Ms. Kelly towards the patient's chair and attempt to finalize her position in it.

Resisting closure

While in the Bakhtinian view dialogue never ends, in practical terms, each clinical encounter ideally concludes in a shared understanding of how to move forward. The angry Ms. Kelly challenges this aim; she will leave the encounter unfinalized by exiting prematurely without giving the student a possibility to summarize. The student thus does not receive a confirmation that the patient will complete a follow-up biopsy. Leaving the encounter prematurely is not the only way the angry patient may react, however. Depending on the student demeanor, she can insist on a detailed plan for the future, someone to call, as well as demand the student to transition to another phase of the encounter if they get stuck in a meaningless monologue or ruminate, asking, "can we just move on?" Here, the multi-personality approach demonstrates that there is no single proper way to respond to bad news: the patients can leave the room in different emotional states with different timing.

As one of the faculty members teaching this class formulated in their class feedback: “it is not necessary to make the patient cry.”

Resisting death/life

Often the sad and angry Ms. Kellys express a fear of ultimate finalization in death. However, when the sad one is leaning toward a depressed disposition, she occasionally evokes a possibility that she would commit suicide after leaving the office. The student thus needs to learn to live with the uncertainty of not knowing when and how the story or the character will be finalized.[8] The student doesn’t know whether the patient will do something to harm themselves, whether they will agree to have a biopsy, or whether the patient will die due to this pathological finding. The simulation is thus concluded after the encounter, but there is no narrative resolution.

Discussion

While this paper was written from the viewpoint of performance and media studies, personality types are more widely studied in psychology and behavioral science. In fact, studies of personality identify three replicable personality types; resilients, overcontrollers, and undercontrollers, based on similar intraindividual organizations of experience and behavior.[18] Though these types could be linked to the SP performance as well, our focus deviates from the characteristic quest for replicability and consistency of the psychology studies. Namely, while the SPs begin to “replicate” one of the three personality types in each student encounter, the purposeful ambiguity and uncertainty arise when one type transforms into another depending on student behavior. In fact, in having the goal of realistically simulating the high-pressure context of a bad news encounter, it seems plausible that even a resilient personality type may demonstrate traits of an overcontroller and/or undercontroller. Thus, in terms of the SPs performance skills, flexibility to switch between the personality types here seems paramount over the ability for exact replication and consistency. In sum, though our study aligns with definitions of ambiguity, uncertainty, or personality type in psychology, the difference of focus lies in what is considered meaningful in teaching and learning about these in medical education. Instead of focusing on quantification and replicability of the personality types, or reduction of ambiguity and uncertainty, this study appreciated the SPs personality types as performative ways to emphasize ambiguity and uncertainty to stimulate the students’ tolerance of these.

Simulating three distinct versions of the same patient story may, under certain circumstances, encourage students to think that patient encounters can be easily classified, and even lead to patient stereotyping.[19] However, instead of objectifying, thinking of patients as characters amplifies “the focus on the individual who happens to have a disease instead of concentrating on the disease that happens to reside in a person”.[5] Similarly, our findings suggest that a single-performer repetitious but emotionally variating human simulation has the capacity to resist finalization into stereotypes, benefitting from having the same individual perform three different emotional states. This iterative “variation-based” approach to simulation has the potential to demonstrate that seemingly similar individuals of the same age and gender may respond in dramatically different ways, as well as transition both abruptly and gradually through several emotions during one encounter. After all, actual patients do not resemble the neatly constructed cases common in medical education.[20] Furthermore, the same simulation done in three different ways in one class has a capacity to demonstrate that the timing and rhythm of the encounter may significantly vary with different kinds of “lifeworlds”,[21] and with different states of mind of the patient. Through the lens of unfinalizability, the simulation world is thus not stagnant, but the student enters a microcosm that is in a constant state of evolution and co-creation

with the standardized patient. In particular, Bakhtin's concept of unfinalizability respects the possibility that a person can change, and that they are never fully revealed or fully known.[8]

Both the scripted and unscripted SP performance includes rapid shifts between memories and future projections in the patient's lifeworld, pointing to the relevance of time perception to breaking bad news simulation; the student is asked to listen and respond to the patient's alternating references to their memories, embarrassment of their test results, and hopes for the future. Yet, the temporal dimension of the simulation scenario involves not only the internal time-zones of the character, but the rhythm of the encounter as well. For instance, the student begins their performance from an unfortunate (but realistic) situation in which their character (the substitute doctor) is already running behind schedule, while the patient's new job and financial security is pending, and the parking meter of the hospital garage is ticking. The simulation thus expands the space and time dimensions of the breaking bad news encounter at the doctor's office, by including shifts between different time zones in the patient's emotional-experiential continuum. Often, rapid shifts between these time zones and the emotions associated with them leads to the patient "spiraling." This was addressed in the classroom feedback, when the medical school faculty provided advice in how to "pull" the patient back into the here and now and "take one step at a time," and subsequently, to demonstrate that this is a path the patient and the doctor will take together. Typically, having a biopsy is considered an important first step in this journey. According to the medical school instructors for the class where this study took place, explaining the next step and daring to call it a biopsy (instead of vaguely "some tests") would show confidence; the doctor knows where they are going, and there is a path to follow.

Our study suggests that the analogies to literature and storytelling may be useful in discussing the skillset required in sketching the path and destination in a breaking bad news encounter. Namely, next to the six-step SPIKES protocol or an adaptation thereof,[22] developed to help structure the disclosure of unfavorable medical information, and the patient's lifeworld narrative, there should be a third storyline emerging: the path the doctor and the patient will travel together. Here, thus, the physician is asked to think like a writer-storyteller with skills and sensitivities necessary for story construction.[5] However, this does not mean sketching a convincing restitution narrative for an individual patient, to be journeyed alone. Not only would promising such a scenario be untruthful at this point, but it may also create a sense of abandonment.[16] Instead, while not an official learning goal of the class, the SP performance requests the physician to weave aspects of the clinical sequence of breaking bad news and the patient's lifeworld into a shared journey that is now emerging ahead of both of them. In fact, the student should develop an understanding of themselves as a co-author and companion in the scenario. In essence, the physician is drawing an initial "map and destination," which the patient confronted with a serious illness has lost,[9] as well as accompanying the patient.[23] The story may or may not be finalized in restitution, but it can be journeyed together.

Our study is an initial effort to map out how the SPs' performative techniques offer opportunities for medical trainees to practice tolerance of ambiguity and uncertainty in a breaking bad news simulation. For follow-up studies, we propose that consideration of the patient's time-zones or temporal frames in simulation scenarios could have a particular added value. Namely, different temporal frames have been associated with aspects of wellbeing, including depression, anger and risk-taking.[24] By manifesting these mental-emotional states and the associated temporal frames through different personality types, the SPs' performative techniques have the potential to assist the students to realize a

relationship between the patient's emotional response and their temporal frame. This approach offers students a way to understand and empathize with individuals with different perceptions of time, and tolerance to witness the illness experience as one of losing a linear sense of time.

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