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The Function of Internet Memes in Helping EMS Providers Cope with Stress and Burnout

By

Caroline Drury

An Undergraduate Thesis Submitted in Partial Fulfillment of the Requirements for the University Honors Scholars Program Honors College East Tennessee State University

Introduction

When a person has a medical emergency that prompts them to call Emergency Medical Services (EMS), they expect that the Emergency Medical Technicians (EMTs) who show up will be highly trained, eager to work in even the most stressful conditions, and ready to "save the day." While many EMTs enter the field of EMS because they enjoy working in fast-paced, high-stakes environments, they often experience burnout. Burnout often has to do with a combination of factors: traumatic stress experienced on calls, administrative workloads to do outside of calls, and poor work-life balance. EMTs tend to work long hours (12, 24, and even 48 hour shifts are common), and are often paid low wages. Burnout can lead to poor job performance, which could be dangerous for both the EMT and the patient. As an Advanced Emergency Medical Technician myself, I have experienced burnout, particularly while taking my certification class in addition to taking 15 credit hours of college classes. While experiencing burnout, one way that I found relief was through humor, particularly through humorous Internet memes that relate to EMS topics. The goal of my research is to find out if Internet memes can help EMTs cope with stress and burnout.

This project is important to me because emergency medicine is one of my primary interests. Through my training and volunteer work, I have been exposed to EMS systems in Nashville and Johnson City, Tennessee; and Boone, North Carolina. I have met many EMTs who seem burnt out, and who resort to unhealthy coping mechanisms. For instance, in my experience, I have met very few EMTs who do not smoke, vape, or chew tobacco. I want to learn more about what causes EMS provider burnout, and possible ways to manage it. This also has personal implications for myself, because my goal is to work as an Advanced EMT after graduating college, before eventually attending medical school to become an emergency physician.

For informative purposes, I want to clarify the difference between an EMT and a paramedic, as I use both terms in this paper. EMT is an umbrella term that generally refers to anyone who has state certification in prehospital emergency care (even if they do not necessarily work in a prehospital environment—for example, many emergency room technicians hold EMT certification). There are different levels of EMT certification, depending on state qualifications. Usually, these levels are: Basic EMT, Advanced EMT (or EMT-Intermediate), and Paramedic. The scope of practice for each level varies by country, state, and locality, but in the United States, there are some common patterns: Basic EMTs are trained in Basic Life Support—CPR, AED use, patient assessment, taking vital signs, splinting, and other non-invasive medical interventions. Their training typically takes 10-16 weeks. Advanced EMTs typically have the same training as a Basic, plus extra training in more invasive procedures such as starting IVs, advanced airway devices, and an increased scope of medication administration. Their training usually takes an additional 10-16 weeks on top of their Basic education. Paramedics are fully trained in Advanced Life Support, and can perform endotracheal intubations, perform thoracic decompressions, obtain intraosseous access for the administration of fluids and medications, interpret electrocardiogram (EKG) readings, and administer a wide variety of medications. Paramedics usually have an additional year of training on top of their Advanced and Basic EMT courses, and may also have an Associate's or Bachelor's degree in EMS. All levels of EMTs must maintain their certifications by participating in continuing education courses, although the requirements for these vary state-by-state. For

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the purposes of this paper, I will use the term "EMT" or "EMS Personnel" to refer to anyone who meets the qualifications for a prehospital care provider as determined by the state. If a source specifies that they studied EMTs with a specific level of training (such as paramedics), I will use the same term that they use.

Review of the Literature

Burnout is defined by Maslach and Jackson as "a syndrome of emotional exhaustion and cynicism that occurs frequently among individuals who do 'people-work' of some kind." (Maslach & Jackson, 1981) Grigsby and McKnew describe "the typical 'burned out' paramedic," as "one who is above average in age, considers the work environment unpleasant, the jobs demands physically threatening, and the paperwork load excessive, has problems with coworkers' relationships, and views the requirement for periodic recertification as a threat to his livelihood." (Grigsby & McKnew, 1988). Burnout can manifest itself in many ways. Maslach and Jackson describe three manifestations in the form of emotional exhaustion, depersonalization towards clients or patients, and the tendency to evaluate oneself negatively. Emotional exhaustion often manifests in the form of the worker feeling emotionally drained, fatigued in the morning when they get up, used up at the end of the day, frustrated, stressed, and like they are at the end of their rope. Depersonalization often manifests in acting or feeling as if clients/patients are impersonal "objects," acting callously towards clients/patients, feeling emotionally hardened, and not caring what happens to patients. Feelings of personal achievement include dealing effectively with patients' problems, positively influencing other people's lives, feeling energetic, being able to create a relaxed atmosphere with patients, dealing with emotional problems calmly, and feeling like a sense of

accomplishment. A low score in the area of personal achievement is symptomatic of burnout. The Maslach Burnout Inventory (1981) quantifies a person's burnout through the use of a questionnaire, which poses a statement about how a person feels, and asks the person to rate the frequency and intensity with which they agree with the statement. The statements fall under the umbrella of depersonalization, emotional exhaustion, and personal achievement. For the emotional exhaustion category, the statements are:

- I feel emotionally drained from my work
- I feel used up at the end of the workday
- I feel fatigued when I get up in the morning and have to face another day on the job
- Working with people all day is really a strain for me
- I feel burned out from my work
- I feel frustrated by my job
- I feel I'm working too hard on my job
- Working with people directly puts too much stress on me
- I feel like I'm at the end of my rope

For the depersonalization category, the statements are:

- I feel I treat some recipients as if they were impersonal "objects"
- I've become more callous toward people since I took this job
- I worry that this job is hardening me emotionally
- I really don't care what happens to some recipients
- I feel recipients blame me for some of their problems

For the personal accomplishment category, the statements are:

- I can easily understand how my recipients feel about things
- I deal very effectively with the problems of my recipients
- I feel I'm positively influencing other people's lives through my work
- I feel very energetic
- I can easily create a relaxed atmosphere with my recipients
- I feel exhilarated after working closely with my recipients
- I have accomplished many worthwhile things in this job
- In my work, I deal with emotional problems very calmly

The Maslach Burnout Inventory has been validated and demonstrated to be an accurate tool in quantifying burnout (Maslach & Jackson, 1981), and has been used in many subsequent studies, including several cited in this paper. I will be utilizing the Maslach Burnout Inventory to examine if memes posted on EMS forums suggest that the creator is suffering from some degree of burnout.

Studies have demonstrated that burnout rates among EMTs tend to be higher than for other similar professions. Baier, Roth, Felgner, and Henschke utilized the Maslach Burnout Inventory to examine burnout rates among paramedics in Germany. They found that out of 1101 Paramedics, 290 (25.3%) showed a high degree of emotional exhaustion; 443 (40.2%) showed a high degree of depersonalization; while only 219 (19.9%) showed high feelings of personal achievement. (Baier, Roth, Felgner, & Henschke, 2018). Nirel, Goldwag, Feigenberg, Abadi, and Halpern found that in a survey of 328 Israeli paramedics, 16% percent reported experiencing burnout. Specifically, 35% experienced physical fatigue, 7% experienced cognitive burnout, and 9% experienced emotional exhaustion (Nirel, Goldwag, Feigenberg, Abadi, & Halpern, 2008). Burnout rates among EMS professionals have been historically high: in a 1988 study, Grigsby and McKnew utilized the Jones "Staff Burnout Scale for Health Professionals" to find that paramedics in South Carolina had a higher burnout rate than nurses, even nurses working in emergency medicine. They also found that the highest correlates with burnout were: negative relation with coworkers, general job dissatisfaction, physical threats from job, negative work environment, certification requirements, age, paperwork load, and negative relations with emergency department personnel (Grigsby & McKnew, 1988). Essex and Scott found that 99.3% of volunteer EMS personnel in Suffolk County, New York experienced high rates of depersonalization, and 92% experienced high rates of emotional exhaustion: however, 76.1% also said that they felt a high sense of personal accomplishment. Male personnel tended to have higher scores in both emotional exhaustion and personal accomplishment, although there was no significant difference in depersonalization scores between genders. They also found that 87.7% of volunteer EMS personnel surveyed were also employed elsewhere, which may have helped contribute to increased burnout rates (Essex & Scott, 2010). Nirel et al. found that high rates of paramedics reported that lack of administrative support and monotonous paperwork, long hours, and work-life imbalance contributed to stress. Interestingly, stressors that are specific to EMS—such as working in uncertain situations, performing resuscitation, and sudden transitions from calm to emergency situations—were not highly reported as sources of stress. Additionally, older paramedics were more likely to be stressed by traumatic events and tragedies than younger paramedics. A third of paramedics reported that emotional problems interfered with their work at least occasionally. Nirel et al. also noted that inadequate financial compensation, and insecure work relations contributed to

paramedics' stress (Nirel, et al., 2008). According to the Bureau of Labor Statistics, the 2017 median annual pay for EMTs and Paramedics was \$33,380 (Bureau of Labor Statistics, 2019). Because the 2017 federal poverty level for a 4-person household was an annual income of \$24,600 (2017 Poverty Guidelines), a family of four living on one EMT's salary would be at 136% of the poverty level, which is considered low-income (Koball & Jiang, 2018). Bourdreaux and Mandry report that a review of literature suggests that EMTs consider administrative work to be more stressful than patient care, although patient care, particularly in critical scenarios, can also have an impact on the stress levels of EMTs (Boudreaux & Mandry, 1996). Sliter, Kale, and Yuan found that in firefighters, there was a positive relationship between exposure to traumatic situations and burnout in firefighters. Firefighters and EMTs often work in similar environments (and many personnel operate in both roles in combined Fire/EMS departments), and are often exposed to the same traumatic stressors, such as patient death and gruesome injury (Sliter, Kale, & Yuan, 2013). In a survey of fire and EMS personnel in Durham, North Carolina, Holland found that distress levels were significantly increased in fire and EMS personnel who had experienced the death of a child, as well as those who had to provide emergency care for a friend or family member, victims of disasters, victims of violent crime, or burn victims. However, he also found that a slight majority (60%) of fire and EMS personnel believe that the more often they experience personally distressing incidents, the better they do with coping (Holland, 2011). Crowe et al. surveyed 779 EMTs and 1,374 parametrics across the United States using the Copenhagen Burnout Inventory, which categorizes burnout into "personal," "work related," and "patient related." They found that paramedics were more likely to experience burnout than EMTs

across all three aspects of burnout. The highest rates were in personal burnout (experienced by 38.3% of paramedics and 24.9% of EMTs), followed by work-related burnout (30.1% of paramedics and 19.1% of EMTs), and patient-related burnout (14.4% of paramedics and 5.5% of EMTs). Burnout rates were higher among paramedics, personnel who responded to more than 20 calls per week on average, employees of private ambulance services, and personnel who had between 5 and 15 years of experience. Females were more likely to experience personal burnout, and males were more likely to experience patient-related burnout (Crowe et al., 2017).

Burnout can have many negative results for EMTs, their EMS agencies, and their patients. Maslach and Jackson found that depersonalization and exhaustion from burnout can cause professionals to develop negative, cynical attitudes and feelings towards their clients; but they also feel unhappy and dissatisfied about themselves and their job performance. They also found that burned-out individuals are more likely to be dissatisfied with their opportunities for personal growth and development in their job, have difficulty accurately assessing their own job performance, are more likely to want to leave their job, have higher rates of absenteeism, have impaired relationships both at home and at work, experience physical symptoms such as insomnia, and are more likely to increase use of alcohol and drugs. (Maslach & Jackson, 1981). Blau and Chapman (2011) found that burnout and factors that contribute to burnout impact an EMT's decision to leave their job, and that EMTs who leave the job due to burnout are more likely to find life satisfaction once they are out of the profession, even though most EMTs who leave EMS go on to work in another area of healthcare. (Blau & Chapman, 2011). Baier et al found that among EMS workers in Germany, EMTs who had experienced

burnout were more likely to make mistakes, engage in safety-compromising behaviors, and get injured. (Baier et al., 2018). Crowe et al. found that EMS personnel experiencing burnout were more likely to self-report taking 10 or more sick days off of work within a 12 month period. Additionally, burned-out EMS professionals were more likely to report that they planned leave their main EMS job or to leave the EMS profession altogether (Crowe et al., 2017).

EMTs have many different ways of coping with burnout. Many EMS agencies provide support such as counseling or briefing after stressful incidents. A survey by Newland, Barber, Rose, and Young found that institutional support behind stressful situations (such as debriefing on a difficult case) helped reduce rates of stress and thoughts of suicide in EMTs. (Newland, Barber, Rose, & Young, 2015). Essex and Scott utilized the Coping Methods Checklist to analyze how volunteer EMS personnel coped with burnout. They found that coping varied by gender and years of experience. Women were more likely than men to talk with their significant other, while men were more likely to pick and choose the type of call they went on. Providers with 6 or more years of experience were more likely to engage in risky behaviors, and to keep their thoughts and feelings to themselves. In total, although less than 40% of survey respondents reported "engaging in risky behaviors" as a form of coping, 50.7% said that they "have an alcoholic beverage" to cope. However, the EMTs who utilized these methods tend to find them unhelpful as coping mechanisms. The most helpful coping mechanisms were: talking with colleagues (used by 100% of participants), thinking about positive benefits of work (used by 94.9%), thinking about outside interests (used by 92%), thinking about family (used by 92%), talking with a spouse or significant other (used by 89%), and black humor (used by 77.7%) (Essex & Scott, 2008). Most of the EMTs I have met admit to having morbid senses of humor, which they say they use to cope with the stress that comes with working in emergency services.

Humor has been found as a useful way to cope with stress and burnout. Sliter et al found that humor can act as a buffer between exposure to traumatic stressors and PTSD or burnout (although it does not have an effect on absenteeism). In particular, they noticed anecdotally that firefighters tended to often use dark humor (Sliter et al., 2013). Rosenberg (1991) found that a group of paramedics preferred sexual and ethnic humor before they started EMT school. However, after training, their preference for dark humor increased, while their preference for sexual and ethnic humor declined. She also found that experienced paramedics were more likely to prefer dark humor, and that EMS personnel felt that they could only use the humor with coworkers, family, and friends (i.e. people either in EMS or close enough to them that they could "get" the joke). Rosenberg also found that humor functions as a coping and defense mechanism, allowing paramedics to gain distance from, objectivity about, and mastery over a situation. Humor also helped to enculturate new paramedics into EMS, as it was often used to help the new paramedic feel more comfortable about situations that made them anxious. Paramedics also found that using humor with patients—while different than the humor they used with co-workers—helped to build rapport with the patient when used correctly (Rosenberg, 1991).

A significant way for humor to be communicated among people is via the Internet. The Internet, and in particular social media, allows people to create online communities, and many social media websites have forums, groups, or web pages

specifically for EMS personnel. Some groups are primarily for educational purposes, others provide networking opportunities for EMS personnel, and others are humor-based that allow members to share EMS-related humor and jokes with other EMS personnel. Often, humor is shared in the form of Internet memes, Richard Dawkins coined the term "meme" in his 1976 book The Selfish Gene as a term for a unit of cultural development that, similarly to a gene, replicates itself "by leaping from brain to brain via a process which, in the broad sense, can be called imitation" (Dawkins, 1976). Memes can take many forms—in fact, anything that can be considered part of a culture can be broken down into the base unit of a meme. Dawkins states, "Examples of memes are tunes, ideas, catch-phrases, clothes fashions, ways of making pots or building arches" (Dawkins, 1976). With the modern widespread availability of the Internet, it is easier than ever for memes to propagate themselves. Although there are countless definitions of internet memes, and countless criteria for what qualifies as an internet meme, a useful working definition is that of Patrick Davison's: He defines an internet meme as "a piece of culture, typically a joke, which gains influence through online transmission." Davison states that memes have three components, one of which must be transmitted: manifestation, behavior, and ideal (Davison, 2012). Often, Internet memes take the form of image macros. According to Wiggins and Bowers, an image macro is "an image with captioned text" (Wiggins & Bowers, 2015). (Exploitables, 2018)Image macros are an extremely popular form of meme, and many of the memes on the Reddit forum /r/ems take the form of an image macro. Image macros can be subdivided into several categories. The most popular subcategories of image macros on /r/ems include exploitables (images that have a blank space, allowing people to insert photos to make a

joke about a certain topic [Exploitables, 2018]), object labeling (photos that have specific objects labeled, in order to state a metaphor about a certain situation, topic, or idea [Object Labeling, 2018]), and reaction images (non-edited images, often from a television show or movie, that illustrate the meme creator's reaction to a situation [Reaction Images, 2019]).

Methods

Memes were obtained from the EMS Reddit forum. The URLs of all of Reddit's forums (or "subreddits") are in the format "reddit.com/r/[forum name]; therefore, the EMS Reddit forum will hereafter be referred to as /r/ems. On Reddit, posts are "upvoted" (analogous to a like) or "downvoted" (analogous to a dislike), and the order in which recent posts are shown in a person's newsfeed is based on the posts' scores (upvotes minus downvotes). Each post also indicates the percentage of votes that are upvotes. /r/ems has around 60,500 members and 9 moderators (EMS - Emergency Medical Services). One of the rules of /r/ems is "Only submit memes, image macros, reaction gifs, rage comics, cringe shirts, 'look at this truck', and 'office' type posts etc. on Mondays (0000-2359 EST) (EMS - Emergency Medical Services). Although it is not required to post memes on Mondays, several forum members take part in so-called "Meme Monday," resulting in typically 15 to 20 memes being posted each week. Each week, I examined the newly posted memes to determine if any of them indicated that the poster was experiencing burnout in one of the three dimensions defined by Maslach and Jackson. To qualify as a meme, the post needed to modify an existing piece of pop culture (such as an existing meme, a television show, or a movie—an image macro that used, for example, a picture of a piece of medical equipment would not be counted as a

meme, unless I could find evidence that the picture had been modified and spread). The memes were searched using the Reverse Google Images search, which allowed me to upload the meme and search the Internet for similar images. Most of the information on existing memes came from the meme tracking website "Knowyourmeme.com." Although Knowyourmeme.com is a crowd-sourced website that anyone can edit, the ability of memes to spread rapidly with considerable modification requires that a meme information database can be edited by a large number of people so as to provide more up-to-date tracking information.

I recorded when each EMS meme was posted (month, year) and the number and percentage of upvotes. I also read the comments on each post to examine the response that other members of the forum had had to the post. 9 burnout-related memes were found and analyzed. The memes had been posted between December 2018 and April 2019. Two of the memes (Figure 2 and Figure 5) were posted by the same user, but the rest were posted by different users.

Data and Results



Figure 1: "They're the same picture."

This meme was posted in March 2019 and was 98% upvoted for a total of 241 upvotes. It utilizes a screenshot of a scene from "The Office," where a character asks another character to differentiate between two identical pictures (They're The Same

Picture, 2019). In this case, a picture of an ambulance and a picture of a taxi have been photoshopped on top of the original pictures, to suggest that ambulances and EMS provide the same services as a taxi. A common sentiment among EMS personnel is the frequency of having to care for people who do not need emergency medical care (for example, people who need care for a non-urgent illness, but are unable or unwilling to access a primary care physician or an urgent care facility). This both ties up ambulances and crew that could be needed to respond for life-threatening emergencies, and also causes EMS personnel to feel like they are not accomplishing much—only dealing with the effects of a broken healthcare system. This can create burnout in the "personal accomplishment" category of Maslach's burnout inventory, as well as potentially in the "depersonalization," category, as EMTs begin to see their patients as not the victims of a broken healthcare system, but as system abusers.

This post had only four comments on it. One pointed out that "an ambulance would give way to lights and sirens," indicating a frustration with vehicles that do not yield the right of way to ambulances running their lights and sirens. Another remarked that "cabbies don't mind being called taxi drivers," a reference to the fact that many EMTs and Paramedics experience being called "ambulance drivers," which most EMTs and Paramedics take offense to, as they have skills and training in prehospital care that vastly exceed ambulance driving abilities.



Figure 2: "Change My Mind"

This meme was posted in January 2019. It was upvoted 98% for a total of 220 upvotes. It utilizes the "Change My Mind" meme. This meme originated when conservative podcaster Steven Crowder sat behind a sign reading, "Male Privilege is a myth. Change my mind" at Texas Christian University in 2018. The photo was posted to Crowder's Twitter account, and soon after, people were photoshopping things on top of the "Male Privilege is a Myth" part (Steven Crowder's "Change My Mind" Campus Sign, 2018). In this case, the meme reads, "90% of calls are bullshit. Change my mind," almost as if it is daring someone to disagree with the original poster. This indicates burnout in the "personal achievement" category, as the original poster feels that most of their work has little positive impact. Several of the comments tended to agree with the original poster that a lot of calls are for people who do not need emergency medical services. However, others point out that EMS personnel are still getting paid regardless of the severity of the call, and that without the high volume of minor 911 calls, there would be fewer EMT jobs. Other commenters pointed out that many "minor" calls often express underlying health problems, and they reminded EMTs that just because a patient frequently calls 911, it does not mean that they should not receive a thorough assessment. One user tells a story of how two EMTs at their agency failed to perform a thorough assessment on a "frequent flyer" patient (someone who is known to call 911 for non-serious issues), and they failed to notice that she was having a heart attack. Several commenters also talked about how many EMTs seem to think that it is "cool" to be able to put down non-urgent patients, but that this creates a toxic culture in EMS.

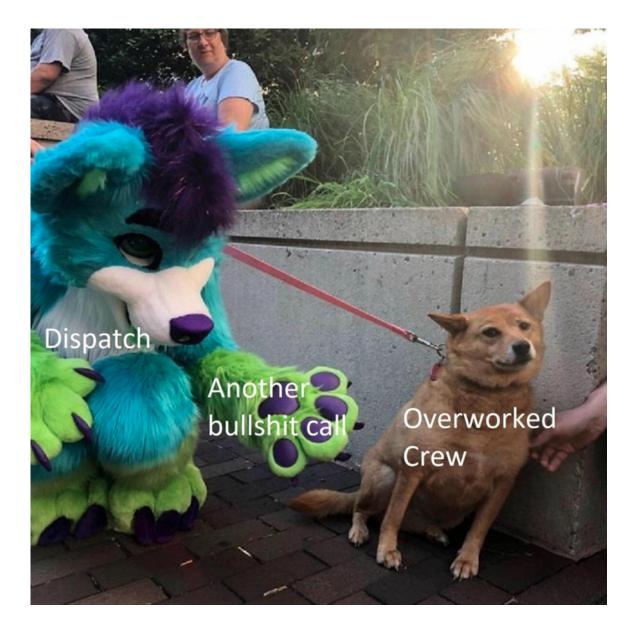


Figure 3: "Furry Scaring Dog"

This meme was posted in February 2018. It was 98% upvoted for a total of 123 upvotes. It utilizes the "Furry Scaring Dog" meme, which is a photo of a person dressed as an anthropomorphic animal (a "furry"), extending their hand towards a dog, who is shying away from it (Furry Scaring Dog, 2019). In this case, the original poster is suggesting that dispatch is attempting to push "another bullshit call" onto an already overworked crew, who are doing their best to avoid it. There were only three main

comments: one suggested a situation of an ambulance being dispatched to an infant that had just been born, but the actual patient turned out to be a psychiatric patient who had never been pregnant. It is unclear if this was in reference to a situation that the commenter had actually experienced. The other comments were from people jokingly telling the original poster to keep "furry" content off of the forum, likely due to the association of people who like to dress up in fur suits with pornography and deviant sexual practices. Similarly to the "Change My Mind" meme discussed earlier, this meme demonstrates many EMTs' beliefs that many of the calls they go on are ones where the patient is not experiencing a true medical emergency. This can be indicative of burnout in the "Personal Achievement" sphere, as EMTs who feel that most of their calls are for non-emergencies may believe that they are not having a positive impact on their communities or their patients. However, unlike the "Change My Mind" meme, this meme generated very little in terms of comments and discussion about the role of minor, nonemergent calls in EMS.

When the tooth pain patient says they need ambulance transport at 4 AM



Figure 4: "You're not just wrong, you're stupid."

This meme was posted in April 2019. It was 100% upvoted for a total of 69 upvotes. This meme utilizes a screenshot from the 2003 movie *The Cat in the Hat* (The Cat in the Hat - You're not just wrong, you're stupid, 2018). This meme indicates burnout in the depersonalization sphere, as it indicates that the original poster feels callously towards their patients—or at least patients who call EMS for non-emergencies, particularly at night when the provider is hoping to get some sleep. While non-emergent 911 calls are increasingly becoming problems in many EMS systems, it is worth noting that tooth pain can sometimes (albeit rarely) be the only presentation of a possibly lifethreatening cardiac problem such as an acute myocardial infarction (Jalali, Vilke, Korenevsky, Castillo, & Wilson, 2014). The top comment on this post was from someone expressing sympathy for the patient, saying that they had experienced an exposed nerve from an infected tooth before, and the pain had been so severe that if they had been "less educated" they might have called 911. However, the original poster refuted by saying that they did mean to say that the patient was not in pain, but they were frustrated by the fact that the patient had been experiencing pain for multiple days and was calling 911 because they couldn't sleep. Another commenter brought up a similar situation where someone had called 911 at 4 AM because of throat pain. The "non-urgent patient in the early morning hours" story is, in my experience, a common one in EMS, and often represents the frustration that EMTs feel by having to work long hours and miss out on sleep for calls that do not require prehospital emergency care.

Me: That hospital is 75 miles away!

-- Dispatch: "YoU GuYS aRe THe cLOsESt AvalLAbLe UnIT!



Figure 5: "Lying Ass 90's Teachers"

This meme was posted in February 2019 and was upvoted 98% for a total of 530 upvotes. A reverse Google Images search of the photo came up with the suggested phrase "lying ass 90s teachers," and the best origin that I could find of the meme came from a post on Reddit, where the image referred to teachers who made students do math problems by hand, with the rationale that students weren't always going to have a calculator on hand (a problem that has now been made obsolete due to the ubiquity of smartphones). This meme appears to be a derivative of the "Mocking Spongebob" meme, which features the titular character of the series "Spongebob Squarepants," imitating a rooster. This meme typically utilizes the imagery, as well as the alternating capital and lowercase letters, to indicate a mocking tone (Mocking SpongeBob, 2018). In this case,

the meme maker is mocking the ambulance dispatcher's rationale for sending their unit to a distant hospital for an inter-facility transport. In the comments section, many EMS personnel discuss the fact that they feel like they have to endure abuse from dispatch in the form of being sent on long transports close to the end of their shift (meaning that they will not get to leave work on time), even sometimes when other, closer units become available before they have gotten to the destination. Other comments discuss the fact that patients will sometimes demand to be taken to specific hospitals that are as far as a 2hour drive away. In situations where patients are experiencing true emergencies, most EMS protocols dictate that the EMS personnel must transport the patient to the nearest suitable hospital. When patients get upset with the EMT for following protocols, this can contribute to feelings of burnout, as providers may feel as though their patients are blaming them for their problems, and can cause tension in the patient-provider relationship.





Figure 6: "I'm in danger"

This meme was posted in February 2019, and was upvoted 99% for a total of 882 upvotes. This meme utilizes a screenshot from "The Simpsons," and features a character giggling and saying "I'm in danger," while on a bus, which is being driven by two other characters that are violently fighting with each other. This meme is typically used to make a joke about a situation perceived to be "dangerous," whether literal or figurative (Ralph In Danger, 2018). The meme creator titled their post with "[MEME] Had this fun

moment today," indicating that they had experienced their patient with homicidal ideations beginning to remove his restraints. This demonstrates the fact that EMS personnel often have to transport patients who, due to mental illness, brain injury, hypoxia, or other factors, may become violent. In fact, 65% of EMS Personnel report being physically attacked on the job, and in 10% of these incidents a weapon was used (Maguire et al. 2018). Several comments were from EMTs who had had to transport patients with psychiatric issues. There was also discussion about how to deal with violent patients. One comment talked about using ketamine to calm patients down, which is a commonly used form of chemical restraint, although in most jurisdictions, ketamine can only be administered by a paramedic. Another talked about allowing patients to run away. Several comments also made mentions of "an O2 bolus," "High volume O2 therapy," and "600 liters per second of O2," which is a reference to hitting a violent patient with an oxygen tank. Most of these comments appeared to be jokes, although it can be difficult to discern sarcasm versus sincerity over written internet posts, and several commenters said that they felt like they should be able to physically defend themselves if necessary. "Physical threats from work" are a common source of burnout among EMS personnel (Grigsby & McKnew, 1988), and burnout can lead to providers treating some of their patients as "impersonal objects" (Maslach & Jackson, 1981). The jokes about "O2 boluses" may indicate burnout, as a burned-out EMT would be more likely to see violence towards a patient as acceptable.

Interestingly, the second most upvoted comment thread was a communication between a former psychiatric patient and the original poster. A user commented how they had had a mental health episode where they experienced intrusive thoughts about hurting themselves and other people. They went to the emergency room and later had to be transported via ambulance to a psychiatric hospital. During the ambulance ride, they were so afraid that the EMTs would be scared of them that they did not move, even after the EMT told them that they could adjust their position to be more comfortable. In fact, that interaction had made the commenter want to work in EMS. The original poster replied to say that they understood the patient's point of view, and had exaggerated the situation slightly for the meme, and that the patient had actually been cooperative and respectful. The commenter thanked the original poster for their understanding, and said that they had laughed at the meme. This interaction showed how memes can help to contribute to mutual understanding between patients and providers.



Figure 7: "96 hours of overtime"

This meme was posted in December 2018. It was upvoted 99% for a total of 199 upvotes. A reverse Google Images search led me to a similar meme on knowyourmeme.com, which had the gasoline can labeled as "sad music" and the fire

labeled as "my problems" (2meirl4meirl - Me / Sad Music / My Problems, 2018). In this meme, the gasoline can is labeled as "96 hours of overtime" and the fire is "my mental health," implying that the original poster is suggesting that they would take on 96 hours of overtime despite the negative health impacts. There were only two main comments; one said that they would not be able to cope with taking on that extra overtime, although they would appreciate the extra pay. The second comment was from someone claiming to be a flight paramedic, saying that they loved their job and made good money, but could not imagine taking on that kind of workload. This comment was actually met with downvotes, to the point that the comment's score had a total of -14. A reply to this comment was from someone who said they made a dollar over minimum wage. Low pav is a common source of stress and burnout among EMS personnel that is likely to lead to burnout (Nirel et al., 2008). Often, EMS personnel may struggle to make ends meet, and some agencies pay less than entry-level wages at big-box retail stores or fast food chains. Many EMS personnel also adhere to a culture of toughness, so they may take on work until they are at a breaking point.



When you're lecturing your patient for driving under the influence and remember you've been awake for 48 hours

Figure 8: "Spider-Man Pointing at Spider-Man"

This meme was posted in December 2018. It was 99% upvoted for a total of 1,100 upvotes. It utilizes a screenshot of a 1960's Spider-Man cartoon, where the titular character is pointing at a villain dressed up in an attempt to impersonate him (Spider-Man Pointing at Spider-Man, 2018). In this case, it refers to the fact that the EMT is behaving just as dangerously as the intoxicated driver by driving drowsy—according to the National Sleep Foundation, driving after being awake for 24 hours is comparable to driving with a blood alcohol level of 0.10, which is above the legal limit of 0.08 (National Sleep Foundation, 2019). Although the original poster did not indicate if this was a situation they had really experienced or not, other comments included someone saying they felt guilty, and another one saying they felt it "right in the reality." The top comment was from someone who said that their agency had "exhaustion protocols"—that

is, if an EMT was too exhausted to work, they could take 4 hours or so to rest and recharge—but anyone who used that policy got written up. Another commenter said that dispatchers would make disparaging comments about EMTs who said they did not feel like they could safely make long drives due to exhaustion. Consistent exhaustion from working is highly likely to result in burnout, and Baier et al. found that EMTs who are burnt out are more likely to engage in safety-compromising behaviors while on the job (Baier et al., 2018). This meme helped illustrate how safety may not always be a top priority in some EMS agencies. While the previous meme suggested that EMTs may feel pressured to take on work at the expense of their mental health, this meme suggests that EMTs may feel also feel pressure to take on work at the expense of their physical health and safety.

When you work 90 hours a week and get 3 hours of sleep each night.



Figure 9: "Let's Get This Bread"

This meme was posted in February 2019. It was 98% upvoted for a total of 607 upvotes. This meme combines two already existing memes. The image is a screenshot from the television show "SpongeBob SquarePants," featuring one character, Squidward, whose head has been significantly mutated from its original design. The caption is "Let's get this bread," which is a slang term that evolved through the use of the internet to refer to earning money (Let's Get This Bread, 2018). This meme deals with burnout in the emotional exhaustion sphere, as the original poster indicates that their mental (and perhaps physical) state resembles that of a badly deformed Squidward. However, they are still being driven by the desire to make money. The top comment on this post indicates that financial stressors are often motivation for taking on this level of work—the post was titled "Work hard, play not that hard," and the top comment was "Work hard, accrue less debt hard." Additionally, several other comments were from people talking about the number of hours they had worked recently. One commenter remarked that they had just gotten off a 48 hour shift where they got 2 hours of sleep. A reply to that comment was from someone who sarcastically remarked, "That's it?" before saying that they were about to start on their 15th 12 hour shift in a row. Interestingly, while the first comment was highly upvoted, the second comment was downvoted to a score of -21. This suggests that Reddit EMS culture tends to reward those who have a "tough" appearance and are capable of taking on large amounts of work, until they begin to be condescending towards other EMTs who are experiencing less severe, but still stressful, situations.

Discussion and Conclusion

Although the examined memes did not address burnout directly, many of them indicated that the meme creator was experiencing burnout in at least one dimension. Most of the memes indicated that the sources of burnout were from non-traumatic factors, which is in agreement with the findings from Nirel et al. The possible exception was the "I'm in danger" meme, the comments on which indicated that EMTs' concern for their personal safety may prompt depersonalization towards potentially dangerous patients. Several of the memes expressed frustration with EMS dispatchers, indicating that they may blame dispatch for frustrating calls, or for calls that require a long transport time. Another common theme was exhaustion from working long hours, even at the risk of physical and mental well-being. Often, this was justified by the need to earn money, and many comments cited financial insecurity as reasons for taking on these long shifts. In the "Spider-Man Pointing at Spider-Man" meme, commenters expressed frustration with work environments that encouraged risky behaviors by punishing people who asked for a break when they feared that their level of exhaustion compromised their driving abilities. There also seemed to be somewhat of a culture among EMTs that encouraged complaining about long shifts and having to take on excessive hours but discouraged disparaging others for taking on fewer hours (as evidenced by downvoted comments). Another common theme was frustration with patients for calling EMS for non-emergent calls, especially during late night or early morning hours. This is a fairly significant problem in many EMS agencies, but some commenters refuted memes that expressed this sentiment by pointing out that adopting resentful attitudes towards patients can increase the risk of providers failing to notice potentially severe medical emergencies. In fact, multiple studies have shown that EMS personnel often underestimate the level of care that a person will need when they get to the hospital (Fraess-Phillips, 2016).

The fact that most of the memes examined were upvoted 98 percent or more indicates that most of the viewers who felt strongly enough about the meme to vote on them found them to be funny or relatable. Comments on each meme often dealt with people expressing empathy with the joke, or even creating their own versions of the joke (such as in the "They're The Same Picture" meme where comments focused on facetiously highlighting differences between EMTs and taxi drivers). The comment section was often a space where discussions could be held about both the memes themselves as well as factors that impact EMTs in real life. This information was often valuable. For example, in the "Change My Mind" meme comments section, commenters warned about becoming too jaded towards seemingly non-urgent patients, which can and has caused EMTs to miss critical signs and symptoms that could indicate a true medical emergency. Comments also provided a way for people to share their experiences as both providers and patients, which could potentially help combat depersonalization symptoms of burnout. The "Spider-Man" and "I'm in Danger" memes' comment sections provided ways that people could discuss their experiences as providers dealing with an administrative culture that punished them for taking time to sleep to ensure their safety on an ambulance, as well as experiences of being a psychiatric patient, afraid to move because moving might frighten the paramedic taking care of the patient.

As memes are cultural symbols, they can be used to study and examine certain cultures. In this case, the subculture of EMS was examined via memes about burnout, to see if these memes could help EMS Personnel cope with stress and burnout. Although it is impossible to tell how a meme impacts a specific individual, there were several patterns noted. Burnout memes were generally well-regarded by the members of /r/ems, based on high percentages of upvotes. The memes tended to joke about non-emergent calls that may not necessarily require an ambulance, rather than traumatic or disturbing calls. These memes can also serve to facilitate discussions about concepts in EMS, and can provide a way for people to share their experiences working in EMS. Using memes to create a façade of humor allows EMTs to express their emotions in a more socially acceptable manner. Most importantly, memes can let other people who may be experiencing burnout know that they are not alone.

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